



Gender dimensions of agricultural and rural employment: Differentiated pathways out of poverty

Status, trends and gaps



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Foreword

There's no debate about the importance of women for rural economic growth and poverty reduction. They fill many crucial roles, as farmers, wage labourers and small-scale entrepreneurs, as well as caretakers of children and the elderly. Rural women have the potential to lift their households and communities out of poverty. But they are hampered by persistent gender inequities that limit their access to decent work, which they need as a vehicle for economic empowerment, social advancement and political participation.

Policymakers and researchers seeking to respond to this situation are hindered by gaps in data and analysis. To tap rural women's potential contributions and channel investments appropriately requires an understanding of the complex and dynamic challenges women face. Without that knowledge it is impossible to analyse these fundamental issues or propose appropriate responses. This report is a contribution to that knowledge.

Rural women and men have long had very different work experiences, often to the detriment of women. They lag behind men in access to land, credit, a broad range of technologies, information, advisory services and training. They are frequently shut out of 'social capital', such as farmers' organizations, workers' unions and community networks that can enhance productivity and growth. Yet despite these limitations and the enormous burden of unpaid and mostly invisible work they provide at home and in family businesses every day, women make substantial contributions to feeding their families and their nations.

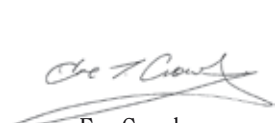
Further complicating the response by policymakers are the variations in the inequities women face, which differ by country and are influenced by social, cultural and religious values and practices.

Also affecting their ability to compete are distant events, such as changes in international trade and migration, financial crises and diversification of the rural economy. This complexity underscores the urgent need for data.

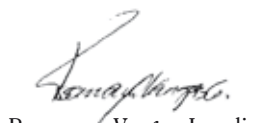
Recognition of this need led our three agencies to organize a technical workshop on the gender dimensions of rural employment, held 31 March to 2 April 2009. It sought answers to important but rarely addressed questions: What do we know exactly about the gender dimensions of agricultural and non-farm rural employment? What are the gaps in data and research? Are there examples of good practices that could be used to address gender inequalities through national policies? This report on the outcomes of the workshop is a first step in providing guidance to policy makers, researchers and development practitioners in developing countries and the international community.

The report reflects the latest thinking on the gender dimensions of rural poverty. The cornerstone of its analysis is the United Nation's Decent Work Agenda, which calls for creating better jobs for both women and men, obtaining social protection for all rural workers, ensuring that labour standards apply to all rural workers and promoting rural institutions that equally represent women's and men's interests.

The workshop and report also highlight collaboration among the three agencies on a topic that is central not only to our mandates but also to achieving the Millennium Development Goals. Almost half the world's people and three quarters of the poor live in rural areas. Addressing gender and rural employment is therefore central to achieving all the Millennium Development Goals – not just the one on gender equality.



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Introduction

Gender equality is an essential component of sustainable economic growth and poverty reduction. Equitable access to more and better jobs in rural areas enable rural women to become effective economic actors and engines of growth; as well as to produce or acquire the food, water, fuel and social services their families need. Indeed, the quality of the care mothers are able to give to their children and other household members contributes to the health and productivity of whole families and communities and improves prospects for future generations. The important gaps in data availability and analytical work in many key areas handicap policy makers' efforts to address these crucial issues adequately when designing poverty alleviation and growth strategies.

With the aim of promoting gender equitable rural employment strategies, the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD) and the International Labour Office (ILO), partnered to carry out an assessment of the latest thinking on the gender dimension of rural and agricultural employment. The three organizations are committed to improving gender equality and women's empowerment in agriculture and rural areas, and to strengthening women's leadership and decision-making participation.

To ensure that reliable statistical data, field-based evidence and good practices highlighting innovative policy solutions would be made available, FAO, IFAD and ILO issued a call for papers to which almost 200 authors responded. Forty papers were then selected for presentation and discussion at a technical workshop on gender and rural employment organized in Rome, from 31 March to 2 April 2009. The main selection criteria for the papers presented were academic rigour and originality of the data and analysis, rather than geographical coverage, even though efforts were made to ensure as balanced

a geographical coverage as possible (72 percent of the papers related to Asia and Africa). Most of the papers selected had been prepared and elaborated by academics (45 percent) and research institutes (19 percent) but also by UN organizations (24 percent), national administrations (7 percent) and civil society (5 percent). The workshop gathered 120 technical experts and development agency representatives, to discuss issues presented in the forty papers and to share their knowledge, questions and experiences.

Designed to encourage maximum interaction among participants, three main topics were discussed: key gender issues, gaps in knowledge, data and approach, and policy implications. From the rich group discussions, the most important conclusions include the following:

- Gender inequalities in rural employment exist everywhere, regardless of the level of economic development in the country/region, but exhibit different patterns according to social, cultural, religious and economic factors. Some of them – such as the burden of unpaid work at home, lack of education and bargaining power, and limited access to assets - clearly constitute significant economic disadvantages for women compared to men. In this context, it is interesting to observe that 90 percent of the wage gap between men and women in developed or developing countries is unexplained: in other words, it is attributed to gender discrimination.
- Women tend to be more risk adverse than men when engaging in rural employment and women's heavy burden of unpaid work is one of the most important factors constraining their access to paid work in rural settings.
- Gender patterns of rural employment change over time and differ across countries, in response to new trends, shocks and opportunities but some

deep set gender inequalities remain. Changes in international trade, migration, financial crises, diversification of the rural economy are a few of the many phenomena that play an important role in changing men and women's rural employment opportunities and roles.

- It is not enough to create more jobs for rural men and women. The quality or decency of those jobs also matter.
- Financial services must be linked to wider sustainable development processes, so that increased access to financial services also contributes to the development of markets, value chains and the strengthening of local and national economies. Both the opportunities and the challenges have gender dimensions that need to be taken into account in the current process of innovation and expansion.
- Sex-disaggregated data are needed to fill critical gaps in knowledge and improve policy decision-making processes.
- Since gender differences in rural employment are many and often inter-related, a package of complementary policy measures are needed, including legal reforms that promote gender equalities, social safety nets, support to the creation of farmers, women and youths' organizations, child care programmes, female education, instruments to improve access to information and labour markets.

The main objective of this publication was to gather the most important data and issues presented and discussed at the workshop to share them with the community of practice in rural development. It combines empirical data and good practices based on national and international experiences on the gender dimension of rural and agricultural employment. The publication presents an update

analysis of current development issues that are crucial for addressing rural poverty and achieving the Millenium Development Goals.

The publication is structured into three main parts: Part 1 is an overview provided by Marzia Fontana (Institute of Development Studies at the University of Sussex) with Cristina Paciello (University of Rome "La Sapienza") presenting issues related to gender equality and rural employment for poverty reduction, that includes the construction of a gender analytical framework across regions and contexts. This section also identifies appropriate policy responses and gender based constraints to the achievement of decent work for all. Part 2 outlines and analyses key issues from the forty papers presented at the workshop, and provides abstracts of all those papers. Finally Part 3 offers a selection of six workshop papers that cover thematic areas of particular relevance to discussions about gender and rural employment.

Acknowledgement

This report is the result of a collaborative effort of the FAO, IFAD and the ILO team working on the Gender Dimension of Rural Employment, and has benefited from the many contributions made by the authors who presented their paper in the technical workshop, and by the technical reviewers:

- Part I was written by Marzia Fontana with Cristina Paciello, who benefited from the support, patience and incisive comments of Jennie Dey de Pryck throughout the development of this chapter, as well as constructive inputs from Sriani Ameratunga, Andre Croppenstedt, Eve Crowley, Miet Maertens, Mieke Meurs, Eva Rathgeber, Sherin Al Shaikhahmed, Ravi Srivastava, Paola Termine, Rosemary Vargas-Lundius, Annina Lubbock, Maria Hartl, and many FAO-IFAD-ILO workshop participants. Vivienne Benson, Tinyan Otuomagie and Rehab Osman provided valuable research assistance.
- Part II was written by Soline de Villard who consolidated the workshop contributions with David Suttie and Brett Shapiro, under the guidance of Jennie Dey de Pryck, Peter Wobst, Eve Crowley, Loretta de Luca and Rosemary Vargas-Lundius and in collaboration with the 40 authors (and their co-authors) who presented their papers at the FAO-ILO-IFAD Workshop “Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty” held in Casa San Bernardo, Rome, 31 March – 2 April 2009: Dinara Alimdjanova; Leigh Anderson (and Diana Fletschner); Kirsten Appendini; Hedayatullah Ashrafi; Jahangir Alam Chowdhury; Albertine De Lange; Cheryl Doss; Simel Esim (and Mansour Omeira); Nelly Figueiredo; Christy George; Ceren Gürkan (and Issa Sanogo); Maria Teresa Gutierrez; Helen Hambly (and Silvia Sarapura); Maria Hartl; Tom Hertz (and Ana Paula de la O); Johannes Jütting; Govind Kelkar; Ayal Kimhi; Amelita King Dejardin; Miet Maertens; Mac Mashiri

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We are also grateful to the workshop participants who shared their knowledge and experience, as well as to the technical teams in the three agencies for their support in screening and reviewing the papers, and in organizing the technical workshop.

Special mention goes to Soline de Villard who was responsible for the overall coordination of the publication, and to Brett Shapiro and David Suttie for overall editorial assistance.

Last but not least, we are particularly thankful to the International Fund for Agricultural Development for providing substantial financing to the project, as well as to the government of France, member countries of FAO and IFAD, and ILO constituents, who offered expertise and financial support to our work programme.

Abbreviations and Acronyms

AIDS	Advanced Immune Deficiency Disorder
CBO	community-based organization
CEACR	Committee of Experts on the Application of Conventions and Applications (ILO)
CRC	Convention on Rights of the Child
DDS	Deccan Development Society
EGS	Employment Guarantee Scheme
ESCAP	Economic and Social Commission for Asia and the Pacific
ETI	Ethical Training Initiative (Kenya)
FAO	Food and Agriculture Organization of the United Nations
FHH	female-headed household
GDP	Gross Domestic Product
HEBI	Horticultural Ethical Business Initiative
HIV	Human Immunodeficiency Syndrome
IATP	Integrated Agricultural Training Programme
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
ILC	International Law Commission
ILO	International Labour Office
INPC	National Consumer Price Index (Brazil)
INSTRAW	United Nations International Research and Training Institute for the Advancement of Women
IPEC	International Programme on the Elimination of Child Labour
IUF	International Union of Food and Agricultural Workers
JFFLS	Junior Farmer Field and Life Schools (FAO)
LDC	least-developed countries
MDGs	Millennium Development Goals
MEDA	Mennonite Economic Development Associates
MENA	Middle East and North Africa
MHH	male-headed households
NGO	non-governmental organization
NREGA	National Rural Employment Guarantee Act (India)
NSS	national sample surveys
NTAE	non-traditional agricultural exports
NUPAWU	National Union of Plantation and Agricultural Workers (Uganda)
ODI	Overseas Development Institute
OECD	Organization for Economic Co-operation and Development
PNAD	National Research by Sample of Dwelling (Brazil)
PROGRESA	Programa de Educacion, Salud y Alimentacion
RIGA	rural income generating activities
RPO	Rural Producers' Association
SEWA	Self-Employed Women's Association
SHG	self-help group
SNA	System of National Accounts (UN)
TVET	Technical and Vocational Education and Training
TVSD	Technical and Vocational Skills Development
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Fund
UNIFEM	United Nations Development Fund for Women
UNIPO	United Nations Industrial Development Organization
UNRISD	United Nations Research Institute for Social Development
USAID	United States Agency for International Development
WFP	World Food Programme
WIETA	Wine Industry and Agriculture Ethical Trading



PART I

Gender dimensions of rural and agricultural employment: Differentiated pathways out of poverty

A global perspective

Marzia Fontana with Cristina Paciello

Introduction

This paper examines the links between gender equality and rural employment for poverty reduction by constructing a gender analytical framework to interpret differentiated patterns and conditions of work across regions, socio-economic contexts and policy environments. The main objective of the study is to identify adequate policy responses to key gender-based constraints to the achievement of decent work for all. Decent work, as defined by the International Labour Organization (ILO), is employment that takes place under conditions of freedom, equity, security and dignity, in which rights are protected and adequate remuneration and social coverage are provided (ILO, 2000).

Gender norms and patterns are rigid, and very often put women in disadvantaged positions relative to men – including limiting women’s equal access to decent work. But gender norms can and do change. Economic policies – at the macro, meso and micro levels – can be designed in ways that are transformative and that enhance gender equity.

The ability of paid employment to expand women’s range of choices – hence contributing to closing persistent gender gaps in labour markets and within households – is related to the type of jobs women have access to, the level and regularity of their earnings, the opportunities for mobilizing and organizing, and the ways in which women’s and men’s productive and reproductive roles are coordinated and protected through policies. ILO statistics (for early studies see Maijd, 2001; for recent updates ILO, 2009a) point to a large number of ‘working poor’ in many developing countries. This is worrying. The poverty reduction and empowerment potential of paid employment depends not just on the quantity of jobs that are created, but also on the quality of such jobs, including whether the rights, protection and voice of both female and male workers are respected.

Rural employment generation has been uneven across the world and in the last few decades appears to be frequently confined to irregular forms of work which do not always provide security of livelihoods and protection of labour rights. The flows of trade, capital, labour, technology and information across countries have accelerated. These processes of globalization provide a strong potential for a reduction in rural poverty, but they have risks and costs. Investments in agriculture also matter: an FAO study of investment trends in agriculture since the 1970s found that countries that reduced hunger more effectively were those with higher net investment rates per agricultural worker (FAO, 2009a: 17). The downside of globalization is most vividly illustrated during times of financial and economic crises, such as the current crisis. The costs of economic and financial liberalization are often borne disproportionately by the poor, and particularly by vulnerable women. This calls for a fuller understanding of key determinants of gender biases in rural labour markets and how the gendered structure of employment is evolving in response to the emerging trends.

The reasons for gender differences in rural employment and pay are many, and are often intertwined. Unequal access to decent work can be noted not only between women and men but also by ethnicity, age and education. Policies that can redress these inequalities include: measures to support education and training; policies to improve access to various markets (including land and credit); active labour market policies and labour legislation; policies to strengthen frameworks for rights; welfare policies; and broader macroeconomic reforms. To be effective, such policies need to be designed as a package of reinforcing measures, as emphasized in the ILO Decent Work Agenda. The decent work policy framework offers an integrated approach to pursuing the objectives of equitable and productive employment for women and men in rural areas. The approach addresses

four pillars simultaneously: (1) generating better jobs for both women and men through sustainable rural growth; (2) extending the coverage of social protection to all categories of rural workers; (3) closing the gap in labour standards for rural workers, paying particular attention to awareness of rights among government institutions, employers' and workers' organizations and individual women and men workers, and to gender bias in enforcement; and (4) fostering social dialogue by promoting rural institutions that equally represent women's and men's interests.

Importantly, any measure aiming at gender equality and poverty reduction must acknowledge that rural women do most of the work of caring for their children and families. The burden of combining productive and reproductive responsibilities inevitably affects their access to paid employment, often increases their stress levels and has an impact on power dynamics within households. These effects are not accounted for in conventional notions of decent work, which tend to focus only on paid employment outcomes. Policies need to be formulated in ways that address all dimensions of work life and do not disadvantage women because of their multiple productive and reproductive roles.

Institutional settings and economic structures vary a great deal between countries, and even between regions within a country. One of the goals of the paper is to identify under what contexts and circumstances some policy instruments are more effective than others. This will evidently vary also with the type of employment, whether waged employment or self-employment is concerned: for example, land reform is likely to be a more relevant enabling factor for own-account farmers than for waged workers, except in cases where agricultural workers themselves are beneficiaries of the land reform programme, as in Southern Africa.

1. Facts and figures: gender patterns of work and links with poverty and current trends

1.1. Gender patterns of work

Rural employment includes farming, self-employment working in trade, small enterprises providing goods and services, wage labour in these and wage labour in agriculture. Some of this work involves long hours and is not sufficiently remunerated. Women, in particular, constitute a significant proportion of unpaid family workers. For example, unpaid work on family agricultural enterprises accounts for 34 percent of women's informal employment in India (compared with 11 percent of men's informal employment) and for an astonishing 85 percent in Egypt (compared with 10 percent for men) (UNIFEM, 2005: Table 3.2).¹

Women and men working in rural settings are often involved in multiple activities and different contractual arrangements simultaneously. They may need to change jobs, depending on the season, or may remain unemployed or underemployed for periods of time.

¹ These data, from UNIFEM (2005), are calculated by one of the report's main authors, drawing on a number of national household and living standards surveys. The distinction between informal and formal self-employment is based on the size of an enterprise and whether it is registered with a government. Social protection coverage is the criterion to distinguish formal from informal wage employment. Informal employment overall is a much larger share of total employment in agriculture than in non-agriculture. The number of unpaid family workers in agricultural enterprises was preferred here as an indicator of vulnerability and precariousness of employment over the definition that includes both contributing family workers and own-account workers. This latter category can be rather heterogeneous and may comprise jobs which, in some cases, do not carry a high economic risk. The ILO does indeed provide separate data on contributing family workers but does not distinguish between rural and urban employment. At the country-level, however, most labour surveys usually allow one to disaggregate employment data by location as well as by economic activity and type of employment.

In rural contexts, the domestic sphere and market production appear to be more intertwined than in urban areas (and pressures on households to provide goods and services both for sale and for the home are stronger). Reproduction activities (such as caring for families), which are mostly on women's shoulders, constitute a heavier time burden because of poor infrastructure and lack of facilities and of institutional support. Necessity and survival are more prevalent driving factors than 'choice' in rural women's diversification strategies, as opposed to rural men's.

A wide range of data on many aspects (e.g. employment status, economic sectors, hours of paid and unpaid work, earnings, working conditions) and at many levels (e.g. household, district, region) are necessary to adequately understand the complexity of rural livelihoods and their gender patterns. Some of these data are not systematically collected or easily found in standard statistics. The researcher concerned with gender dimensions of rural work often has to patch together various sources and rely on a combination of specific case studies and anecdotal evidence. This paper is unfortunately no exception. We did undertake a thorough search of both international and country-level data sources, and are reporting some of the key findings in the next pages. We also tried to indicate areas in which data gaps are most severe.

1.2. The gender structure of rural employment by region

Table I-1 provides a breakdown of sex-disaggregated rural employment by sector and by employment status.² Agriculture continues to be the main source of rural employment for both women and men in sub-Saharan Africa, South Asia and Southeast Asia. In Latin America, rural female workers appear equally distributed between agricultural and non-agricultural sectors (with self-employment more prevalent in agriculture than in manufacturing and services), while rural men work mostly in agriculture, either as self-employed or wage workers. In the Middle East and North Africa (MENA) region, rural women work mostly as self-employed in agriculture and rural men work mostly as non-agricultural wage earners. Non-agricultural activities are the main source of employment for both men and women in Central Asia and Europe, where the majority of the rural population works as wage employees. In most regions, rural women seem more likely than rural men to be engaged in self-employment (and thus less likely to be wage earners).

Table I-1 was compiled by a team from the World Bank, by drawing on 66 different country-level household surveys for 2000 (World Bank, 2007a). This effort demonstrates how hard it is to find detailed and easily accessible rural employment data across countries.³ The data in Table I-1 provide a useful snapshot but should be treated with caution as it is not certain that all the national surveys consulted are comparable. The large number of rural women classified as either 'non-active or not reported' (up to 64 percent of the female population in South Asia, and above 50 percent both in Latin America and the MENA region) appears

² It is important to stress that the data described in Table I-1 refer only to what is reported by the respondents as their main job, and hence does not fully capture the range of employment activities in which individuals may be engaged.

³ The ILO indeed reports up-to-date detailed country-level employment data by status, sex and economic activity (including separate data for agriculture) but does not distinguish by rural and urban location (see <http://laborsta.ilo.org>).

TABLE I-1

Rural employment by gender and employment status, 2000

(percent of the adult population)

Employment status	Sub-Saharan Africa		South Asia		East Asia and the Pacific (excl China)		Middle East and North Africa		Europe and Central Asia		Latin America and the Caribbean	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Agriculture	54.9	60.6	24.1	54.9	44.1	56.2	39.6	34.0	12.3	18.6	25.1	59.3
Self-employed	53.5	56.6	12.7	33.1	38.4	46.8	38.6	24.6	6.9	8.5	22.8	38.4
Wage earner	1.4	4.0	11.4	21.8	5.7	9.4	1.0	9.4	5.4	10.1	2.3	20.9
Non-agriculture	9.6	15.5	5.6	27.2	19.7	28.9	6.7	39.7	19.7	38.7	23.2	26.4
Self-employed	6.8	6.9	2.9	11.8	11.3	11.5	2.8	8.8	1.6	7.4	11.7	9.2
Wage earner	2.8	8.6	2.7	15.4	8.4	17.4	3.9	30.9	18.1	31.3	11.5	17.2
Non-active or not reported	32.7	21.7	64.3	14.6	35.5	14.4	53.3	26.0	46.9	27.5	51.2	13.4
Total	97.2	97.8	94.0	96.7	99.3	99.5	99.6	99.7	78.9	84.8	99.5	99.1
Residual	2.8	2.2	6.0	3.3	0.7	0.5	0.4	0.3	21.1	15.2	0.5	0.9

Source: World Bank, 2007a, World Development Report. Last two rows calculated by the authors.

Note: Data are for 2000 or the nearest year. Based on representative household surveys for 66 countries, which account for 55 percent of the population in sub-Saharan Africa, 97 percent in South Asia, 66 percent in East Asia and the Pacific (excluding China), 47 percent in Middle East and North Africa, 74 percent in Europe and Central Asia and 85 percent in Latin America and the Caribbean. The omitted group includes individuals out of the labour force and individuals whose economic activity is not defined. Activity refers to the individual's reported principal activity. Regular updates of this type of table would be useful.

particularly dubious. It most likely reflects the fact that much of women's work in rural areas is informal or unpaid and thus still goes unrecorded. It is also quite odd that none of the figures in each column sum to 100, as one would expect.⁴

Table I-1 highlights that, in sub-Saharan Africa, where countries are still mostly agriculture-based (in the sense that agriculture contributes significantly to growth and the poor are mostly rural, as defined by the World Bank, 2007a), own-account farming is, not surprisingly, the most common form of employment for both sexes (about 56 percent and 54 percent of male and female adults, respectively, are agricultural self-employed).⁵ This is followed by non-agricultural wage work for men (9 percent) and non-agricultural self-employment for women (7 percent). African women are more likely than African men to be self-employed and to be working in the agricultural sector.

4 These limitations notwithstanding, this seemed the best data source for an overview of gender patterns of rural work differentiated by employment status and activity. Most of the ILO data publicly available (such as the Key Indicators of the Labour Markets database) do not distinguish rural employment from urban employment and are not always up to date (the latest figures we found for sex-disaggregated employment in some African countries, for instance, refer back to the mid-1990s). Most of the tables in the recent International Labour Conference Report devoted to rural employment and poverty reduction (ILC, 2008) are unfortunately not disaggregated by sex.

5 Own-account workers are usually defined as a sub-category of the self-employed, i.e. self-employed workers without employees (ILO, KILM 5th edition). The terms 'own-account workers' and 'self-employed workers' are used interchangeably throughout the text. It is not always clear whether the data and the case studies reviewed here refer to the whole category or to one sub-sample of it. It is likely that more women than men classified as self-employed are indeed own-account workers.

Gender differences in employment status appear to be more marked in South Asia, where only 13 percent of adult women are self-employed in agriculture compared with 33 percent of men, and less than 6 percent of rural women work in non-agricultural sectors compared with 27 percent of men. It is interesting to note that in South Asia, women appear somewhat equally distributed between wage work and self-employment (13 percent and 12 percent, respectively) within agriculture, whereas most men who work in agriculture are self-employed. Women in South Asia are relatively more engaged in agricultural wage employment than are women in any other region, most likely the result of women's weaker property rights in land and other assets than in most other regions, coupled with increasing landlessness.

South Asian women are also more likely to remain unpaid for work on their own family business than in any other region: ILO data for 2007 indicate that 59 percent of the total female labour force in South Asia works as contributing family workers, compared with 36 percent in Southeast Asia and the Pacific, 35 percent in sub-Saharan Africa and only 7 percent in Latin America. The corresponding shares for men are 18 percent in South Asia, 18 percent in sub-Saharan Africa and 4 percent in Latin America (ILO, 2008).⁶

Women as own-account agricultural workers are a significant 38 percent of the rural female workforce in both the MENA region and East Asia and the Pacific, while they are only about 23 percent and 7 percent in Latin America and Europe and Central Asia, respectively. In the latter two regions, on average, agriculture constitutes a small share of gross domestic product (GDP) and poverty is no longer a rural phenomenon (i.e. in these regions most countries are 'urbanized' according to the World Bank's definition).

Non-agricultural employment appears to be less relevant for women than for men in the rural areas of most regions, and particularly in the MENA region, where only 7 percent of rural women work in non-farm activities compared with 40 percent of rural men. The only exception is Latin America, where the ratio of rural women's non-agricultural employment to agricultural employment is higher than the corresponding rural men's ratio.

In sum, overall, rural men appear to be more evenly distributed across sectors and forms of employment. The relationship between the distribution of rural female and male employment and a country's economic structure seems to be one in which a larger share of women tend to work in agriculture, even when agriculture is no longer a dominant sector (such as in transforming countries). Land availability and the structure of land rights in agricultural-based countries influence the form of employment to which rural women have access: a prevalence of wage labour and unpaid family contributions exist in South Asia – a land-scarce region – and (mostly smallholder) self-employment exists in sub-Saharan Africa – a land-abundant region. Latin America, which is the most urbanized of all developing regions (and has the most equal educational levels by gender), is the only region where the ratio of rural women's non-agricultural employment to agricultural employment is higher than the corresponding rural men's ratio.

1.3. Zooming in: the gender structure of rural employment in selected countries of sub-Saharan Africa and South Asia

This section documents the gendered structure of rural employment in selected countries of sub-Saharan Africa and South Asia. While it shows how patterns in specific countries confirm regional patterns discussed earlier, it also identifies possible outliers in the broad picture.

⁶ Please note that these ILO data refer to the overall labour force, including rural and urban employment.

Sub-Saharan Africa

Table I-2 describes the gender characteristics of agriculture in three African countries. Tanzania and Mozambique are agricultural-based countries, whereas South Africa is an urbanized country in which agriculture contributes a very small share of GDP but where poverty rates are higher in rural areas than in urban areas (and inequality remains among the highest in the world). Agriculture is female-intensive in both Mozambique (60 percent of the agricultural labour force is female) and Tanzania (54 percent) but not in South Africa (34 percent). The data for Mozambique and Tanzania confirm African regional patterns

TABLE I-2

Gender structure of agriculture in selected sub-Saharan countries, 2003-2005

(percent)

	Tanzania	Mozambique	South Africa
Agriculture as share of GDP	45.8	23.1	3.1
Employment in agriculture as share of total employment	75.1	78.0	11.3
Female intensity of agriculture	53.6	59.5	34.2
Female employment in agriculture as share of total female employment	80.0	90.9	6.0
Male employment in agriculture as share of total male employment	72.7	64.3	8.6
Rural population as share of total population	76.2	66.3	41.2
Share of the rural population which is poor	38.7	71.3	--

Sources: World Bank 2007a; ILO (<http://laborsta.ilo.org>; Tables 2B and 2E); Tanzania National Bureau of Statistics, 2006, Integrated Labour Force Survey; and South Africa Department of Labour, 2006, Women in the South African Labour Market 1995–2005, Republic of South Africa.

Note: The female intensity of agriculture is calculated as the share of female agricultural employment in total agricultural employment. A share higher than 50 percent would suggest that the sector is female-intensive.

TABLE I-3

Rural employment by gender and employment status, Tanzania 2005

(percent of the adult population, 15 years or older)

Employment status	Female	Male
Agriculture	80.6	78.0
Self-employed	72.4	67.8
Wage earner	0.4	1.6
Unpaid worker	7.8	8.6
Non-agriculture	7.8	12.2
Self-employed	3.9	6.9
Wage earner	1.3	4.4
Unpaid worker	2.6	0.9
Not in the labour force or not reported	11.6	9.8
Total	100.0	100.0

Source: Author's calculations from Tanzania 2006 Integrated Labour Force Survey.

in that agriculture in these countries is the main source of employment for both women and men. The productivity of agriculture is especially low in Mozambique, where agriculture contributes only 23 percent of GDP but provides employment to 78 percent of the labour force.

Table I-3 provides a further breakdown by gender and employment status for the rural adult population of Tanzania. The share of the adult population working in agriculture is higher than regional averages, more so for the female population (81 percent of the female population works in agriculture compared with 55 percent for the corresponding share for the whole of sub-Saharan Africa). The table also shows that similar proportions of women and men work as unpaid family workers in agriculture but that such share is higher for unpaid female workers than for male workers in non-agricultural activities. The category of unpaid workers was not considered in Table I-1.

South Asia

Table I-4 describes the gender characteristics of agriculture in India, Bangladesh and Sri Lanka. The share of the rural population in the total population in these countries is similar to the shares in Tanzania and Mozambique, but agricultural employment is smaller even though still significant (more than 50 percent of total employment) in both India and Bangladesh. Agriculture is a female-intensive activity in both India and Bangladesh, and in Bangladesh provides employment to more than 60 percent of the total female labour force (mostly in the form of rice production and poultry rearing). In Sri Lanka, agriculture appears to be less labour- and female-intensive than in the other two South Asian countries.

TABLE I-4

Gender structure of agriculture in selected South Asian countries, 2003-2005

(percent)

	India	Bangladesh	Sri Lanka
Agriculture share of GDP	19.3	21.0	17.9
Agricultural employment as share of total employment	57.0	51.7	34.7
Female intensity of agriculture	55.5	51.5	40.1
Female agricultural employment as share of total female employment	46.0	60.9	39.9
Male agricultural employment as share of total male employment	35.5	45.1	29.6
Rural population as share of total population	71.7	75.3	84.8
Share of the rural population which is poor	21.8	53.0	22.0

Source: Author's calculations from various India National Sample Surveys (NSS) data, Bangladesh 2000 Labour Force Survey and Sri Lanka 2006 Census and Statistics. GDP and population data from World Bank, 2007a.

Table I-5 provides a further breakdown by gender and employment status for the rural adult population of India. The share of the female adult population in both agriculture and non-agriculture work is higher than regional averages, and the share of female casual agricultural labour is especially significant (about 30 percent of the total female rural workforce). This confirms that the low female participation rates recorded for South Asia in Table I-1 may likely reflect the under-reporting of informal employment, particularly for women. The male shares are more similar to regional patterns. Of note, in particular, is the high share of the rural male labour force working in non-agricultural activities relative to the high share of the rural female labour force working in agriculture, suggesting some ‘feminization of agriculture’ (as more fully documented in Srivastava and Srivastava, 2009).

TABLE I-5**Rural employment by gender and employment status, India 2005**

(percent of the adult population)

Employment status	Female	Male
Agriculture	83.2	66.5
Self-employed	53.7	42.4
Regular/salaried	0.4	0.9
Casual labour	29.1	23.2
Non-agriculture	16.8	33.5
Self-employed	10.0	15.7
Regular/salaried	3.3	8.1
Casual labour	3.5	9.7
Total	100.0	100.0

Source: Adapted from Srivastava and Srivastava, 2009.

Table I-6 is taken from an interesting comparative study of four countries in sub-Saharan Africa and South Asia (Horrell et al., 2008) and offers a different way of looking at employment patterns – no longer from a macro country-wide perspective as in the previous tables, but from a micro perspective.⁷ It looks at the gender division of labour by activities and tasks from the point of view of the household. It draws attention to the fact that rural households, in particular farming households, derive their livelihood from diverse sources of farm, off-farm and non-farm income and that the intensity and type of contribution of different family members are gender differentiated. Table I-6 only focuses on work in agriculture and other off-farm activities (for subsistence and sale) among male-headed households and excludes housework, which is later reported for the same household sample in Table I-10. Women contribute substantially to total productive work in male-headed households in Zimbabwe (about 40 percent of the total) but not in Ethiopia (where women’s contribution can be less than 10 percent). In Zimbabwe, the vast majority of the work involves own farming (more than 90 percent of total activities),

7 The data were collected in a few districts in each country and thus are not nationally representative.

TABLE I-6

Time spent working (excludes housework and child care) in male-headed households, Zimbabwe, Ethiopia, Uganda and India, around 2002^a

	Zimbabwe			Ethiopia		Uganda		India	
	Mutoko	Magoni	Chivi	Omo Beko	Afeta	Sironko	Bufumbo	Vepur	Guddi
Sample	81	75	75	128	106	119	144	135	120
Work hours per day:									
Total per household	15.9	19.7	21.7	10.1	10.2	16.6	16.1	23.8	23.2
Per capita	3.1	3.7	3.6	3.9 ^b	3.6 ^b	2.2	2.2	3.8	3.6
No. in household	5.2	5.2	6.1	5.1	5.8	7.4	7.2	6.3	6.4
Total work hours (percent) contributed by:									
Men	37.2	33.7	30.3	68.0	60.0	33.8	30.4	32.2	30.1
Women	42.0	35.2	31.6	3.2	13.3	30.9	29.6	23.2	25.3
Children	16.6	24.4	29.1	26.0	22.2	-	4.7	19.9	21.8
Relatives	4.3	6.6	8.3	2.8	4.3	35.3	35.0	24.8	22.9
Total work hours (percent) spent on:									
Own farm	89.3	95.3	95.4	83.5	79.0	62.0	67.4	33.6	38.9
Livestock	5.0	1.1	1.2	1.3	4.0	8.4	5.1	16.4	10.7
Waged work/ business	5.7	3.6	3.4	15.2	16.8	28.9	26.0	50.0	50.4
Farm work (percent) done by:									
Men	38.6	32.9	30.0	66.6	65.5	30.4	26.0	44.4	38.5
Women	44.9	36.1	31.7	3.9	13.2	36.2	35.1	18.3	28.2
Children	13.5	24.7	29.3	29.5	19.2	-	6.3	11.8	11.9
Relatives	3.0	6.3	8.7	-	2.1	33.4	32.6	25.5	21.5
Livestock keeping (percent) done by:									
Men	-	-	-	-	-	51.0	37.4	29.1	33.6
Women	-	38.1	-	-	24.3	5.8	19.1	0.0	2.0
Children	81.0	-	100.0	100.0	64.8	-	5.5	48.1	34.2
Relatives	-	-	-	-	10.8	43.2	38.0	22.8	30.2
Paid work (percent) done by^c:									
Men	46.2	64.8	51.7	77.5	55.8	36.6	37.1	17.0	17.4
Women	32.3	11.3	48.3	-	5.1	27.0	20.1	40.8	29.9
Children	9.7	23.9	-	-	23.5	-	-	16.5	27.8
Relatives	11.8	-	-	22.5	15.4	36.4	42.7	25.8	24.9

Source: Horrell et al., 2008, Table 3.1: p.34.

Notes:

a/ In Zimbabwe no adults reported their main activity as either housework or child care. However, these activities constituted 18 percent of women's time and 22 percent of other relatives' time in India and 42 percent of household total work time in Ethiopia, of which 77 percent was done by women, the remainder being done by children and other relatives.

b/ These figures are only given for those who reported a main activity; a number of people in Ethiopia were not recorded as having any activity.

c/ For India, this refers to local waged work on- and off-farm. Of total work hours, some 35 percent were spent as local waged work, mostly on-farm, and 10 percent as waged work away from the village, other paid work and running one's own business.

while in Uganda waged work/business constitutes between 26 percent and 29 percent of total work. The share of waged work/business in total employment is highest in Andhra Pradesh, India (more than 50 percent of the total). This could be expected, as Andhra Pradesh is a strong-performing state, classified as in between a ‘transforming’ and ‘urbanized’ economy (World Bank, 2007a: Box 1-3). Farm work is mostly provided by men (except in Zimbabwe, where women are the main contributors), while livestock keeping is almost exclusively a children’s activity in all the African countries. Children, more in general, seem to contribute significantly to household agricultural activities (up to seven hours per day in some regions). The share of paid work done by men relative to other family members is the highest across all African countries, and in particular in Ethiopia. In India, the share of paid work done by women, other relatives and children is higher than elsewhere and than the share done by men. This is a fascinating study, and more research of this kind would allow for more generalized understandings.

A few useful lessons can be drawn from this ‘zooming in’ section. First, disaggregated national-level surveys certainly allow for more nuances than international multi-country datasets, but their analysis is still significantly hampered by the lack of comprehensive and comparable statistics over time for a number of countries. Problems of definitions and irregularity in the collection of sex-disaggregated data need to be urgently addressed, particularly in least-developed countries (LDCs). Second, more innovative ways of collecting and reporting gender data need to be fostered, including by international organizations such as FAO and ILO. A gender perspective to rural livelihoods would require a better understanding of the division of tasks and complex decision making between members of the same household unit – not only between husbands and wives, but including children and other relatives of different age and social status. In other words, economists need to pay greater attention to the characteristics and circumstances of the women and men who are growing crops and producing goods, not in isolation, but in their relationship to each other. The study by Horrell *et al.*, (2008) offers a promising example in this regard. Their method could be extended to a wider range of household structures and settings.

The data presented so far offer only little hints as to the quality of employment opportunities available and the extent of gender-differentiated decent work deficits. Both farm and non-farm activities are very heterogeneous categories comprising both low- and high-return occupations with different entry requirements. For example, both land size and land quality matter for agricultural productivity, so it is essential to know whether landholding differs by gender in a country. As for wage work, we have seen, for instance, that a significant share of women in South Asia work as agricultural labourers but we do not know whether they receive similar wages and benefit from similar entitlements as male agricultural labourers. Richer evidence on the quality of employment – not simply on its quantity and distribution – is needed in order to fully understand the relationship between employment and gender equality/poverty outcomes. The next section looks at these aspects in further detail.

1.4. Gender and decent rural work deficits

Some of the factors that may push women into a disadvantaged economic position relative to men in terms of the returns to their labour are: (a) employment (occupation and task) segmentation (women are disproportionately employed in low-quality jobs, including jobs in which their rights are not adequately respected and social protection is limited);

(b) the gender gap in earnings (partly as a consequence of high segmentation; women earn less for a given type of work than do men – usually for both wage employment and self-employment); and (c) fewer hours of paid work but overall larger work burdens (due to competing demands of care responsibilities and non-market work, women spend less time on average in remunerated work, which lowers their total labour income and is likely to increase stress and fatigue).

1.4.1. Employment segmentation and working conditions

There is evidence of gender-based labour market segmentation in both agricultural and non-agricultural sectors in most rural areas. Women tend to be clustered in fewer sectors than men and, in agriculture, tend to be mostly involved in subsistence production. This segmentation suggests that it may be more difficult for women than men to switch to better jobs in new sectors when new economic opportunities arise. Many rural workers, especially in agriculture, face difficulties and gaps in protection with regard to their basic rights. Women are likely to experience these problems in more severe ways than men, but unfortunately statistics on coverage and enforcement remain sparse (ILC, 2008). Variations in patterns across regions and countries are summarized in Tables I-7 and I-8.

Sectoral differences and working conditions

As for the agricultural sectors, there seems to be a common pattern across regions in that women tend to be the main producers of food while men appear to be managing most of the commercial crops, although not without women's (often unpaid) contributions. Women also participate in commercial farming but within a rather rigid division of tasks. This rigidity in the gender division of tasks appears to be stronger in South Asia than in parts of Africa or Southeast Asia. It is important to note (previewing the discussion in the following sections) some sort of asymmetry in the dynamics regarding the gender division of crops: men may take over crops traditionally cultivated by women when these became more profitable (for example, in Zambia and the Gambia), but there seems to be no evidence of women taking over the management of crops previously controlled by men, except possibly in rare cases when the men in the household migrate (such as in Southeast Asia and China). As for agricultural wage workers, it appears that working conditions for women are harsher than for men across regions, but this aspect would need to be better documented.

In non-agricultural employment there is a similar pattern of marked concentration of the rural female labour force in only very few sectors relative to the male labour force. One of the most prevalent forms of rural non-agricultural employment for women in all regions, and particularly in Latin America, is domestic services. Domestic work, however, often pays below the agricultural wage rate (e.g. Brazil) and offers no social protection. Domestic workers are often migrants or belong to minority groups. Petty trade is a more prevalent activity for women in Africa, Latin America and some Southeast Asian countries than in South Asia. In South Asia, most female non-agricultural activities are home-based, reflecting prevailing strict norms of women's seclusion, particularly in parts of Afghanistan, Bangladesh and Pakistan. The location of their work (within private homes) makes it more difficult to enforce legislation. In sum, in most developing regions women appear to be overwhelmingly represented among the most vulnerable categories

TABLE I-7

Gender division of labour and working conditions in crop production

	Sub-Saharan Africa	Asia	Latin America
Crop types	<p>Women tend to be the main producers of food crops, such as maize, rice, cassava and other tubers, while men are more engaged in commercial farming and produce cocoa, cotton and coffee for export. However, there are several cases (e.g. Burkina Faso, Tanzania, Zambia) where male and female farmers jointly grow food and commercial crops. Men may move into activities that are considered female if these have become more productive or profitable (e.g. Gambia, Tanzania, Uganda, Zambia). Women are also involved in non-traditional agricultural exports (NTAEs) in Kenya, South Africa, Uganda, Zimbabwe. Most NTAEs production is female-dominated.</p>	<p>Women produce mostly food crops, whereas men tend to diversify into commercial farming. In some countries in Southeast Asia and South Asia, women are involved in cash crops (e.g. cotton in Pakistan, peanut production in the Philippines and Thailand, poppies in Afghanistan) but the gender division of tasks remains marked. Especially in Southeast Asia, women are heavily involved in rice production, where they constitute up to 90 percent of the labour force. In Cambodia and Vietnam, female farmers also take on male tasks (such as land preparation and irrigation) when male labour is not available. In China, differences in the gender division of crops and tasks depend on agro-ecological characteristics, production systems and crop types. Where male out-migration is high, women work on both cash and food crops and perform most farming activities, including use of machinery. They become main decision makers regarding choice of crops, fertilizer use and marketing, but men retain power in public affairs at the community level (e.g. Southwestern Provinces).</p>	<p>Women farmers cultivate food crops, poultry and small livestock for domestic consumption, while men dominate large-scale cash-crop farming. Women are involved in NTAEs, particularly in Chile, Colombia, Ecuador, Mexico and most of Central America, but NTAE production is highly gender-segmented in the sense that men occupy more permanent positions and women are the vast majority of seasonal workers. Also, women are found mostly in packing houses and other related activities while the gender composition of labourers in the field is more mixed.</p>
Working conditions	<p>Women tend to manage smaller plots than men (e.g. Mozambique). In NTAEs, women tend to work in more precarious positions than men, with no social protection and only seasonal contracts (e.g. in South Africa women are 69 percent of temporary workers; in Tanzania casual workers planting, harvesting and grading in flower farms are mostly women, while men occupy a small number of managerial positions). Women are exposed to sexual and verbal abuses (e.g. Kenya, South Africa).</p>	<p>There are very high shares of unremunerated female family workers and increasing casualization of agricultural labour, both male and female (e.g. India).</p>	<p>Women tend to manage smaller plots than men (e.g. Jamaica, Mexico). In NTAEs, women form the bulk of temporary and seasonal workers, with low social protection coverage, whereas permanent jobs are generally reserved for men (e.g. Chile, Colombia, Peru). Women usually comprise only a small percentage of managers and supervisors in high-value agricultural export industries. Workers in NTAEs are exposed to high use of pesticides and other chemical and toxic substances, which are likely to be particularly damaging to women's health. Women often fall prey to verbal abuse and sexual harassment by male supervisors (e.g. Ecuador).</p>

Sources: **For sub-Saharan Africa:** Whithead and Kabeer, 2001 (Burkina Faso, Tanzania, Zambia); Von Braun, John and Puetz, 1994 (Gambia); Wold, 1997 (Zambia); World Bank, FAO and IFAD, 2009 (Kenya); Asea and Kaija 2000 (Uganda); Barrientos and Kritzing, 2002 (South Africa); REACH, 2007 (South Africa); Dolan and Sorby, 2003 (various countries); FAO, 2005a (Mozambique); ILO, 2003 (Tanzania); Barrientos et al., 2001 (Zambia). **For Asia:** FAO, 1998; FAO, 2005b; FAO, Fact Sheet Bangladesh; <http://www.fao.org/sd/Wpdirect/WPre0104.htm> (Bangladesh); World Bank, 2006 (Pakistan); Balakrishnan et al., 1998 (the Philippines and Thailand); World Bank, n.d. (Afghanistan); FAO, n.d. (Southeast Asia); FAO, Fact Sheet Cambodia, <http://www.fao.org/sd/Wpdirect/WPre0106.htm> (Cambodia); FAO, Fact Sheet Vietnam, <http://www.fao.org/sd/Wpdirect/WPre0113.htm> (Vietnam); FAO, 2005b and Song et al., 2009 (China); Jackson and Rao, 2004 (India). **For Latin America and the Caribbean:** FAO, 1998; Deere, 2005 and Garcia, 2006 (Mexico and Jamaica); Dolan and Sorby, 2003; Kabeer, 2008 and Appendini, 2002 (Mexico); Raynolds, 1998 (the Dominican Republic); Ferm, 2008 (Peru and Colombia); Katz, 1995 (Guatemala); Barrientos et al., 1999 (Chile); Mena and Proano, 2005 (Ecuador).

TABLE I-8

Gender division of labour and working conditions in non-agricultural activities

	Sub-Saharan Africa	Asia	Latin America
Sectors	Women are involved in small-scale low-returns marketing and they trade only particular commodities (e.g. perishable fresh produce for domestic markets), whereas men are more likely involved in trading for international markets (e.g. Burkina Faso, Eastern Guinea, Ghana, Tanzania, Uganda). Large shares of women work as domestic workers (e.g. Mozambique, South Africa). In Ghana and Uganda, women are clustered into wholesale/retail trade and manufacturing, while men's activities range across public administration, trade, construction, transport and mining.	In Afghanistan, regions of India (Kerala and West Bengal) and Uzbekistan, women are engaged in manufacturing (e.g. dress making) and domestic and catering services but NOT in trade. In Sri Lanka, women market local agricultural produce, prepare cooked foods for sale, especially rice and flour-based foods, run small grocery shops and make and sell handicrafts. In Southeast Asia (Indonesia, the Philippines, Thailand, Vietnam) women are involved in small trade, particularly of agricultural goods. In China, women participate in light industry. Men are mainly involved in construction, commerce, transportation and services.	Women tend to be involved mostly in domestic services (Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Mexico, Nicaragua, Panama) and petty trade (El Salvador, Guatemala, Honduras, Paraguay). Men are involved mainly in mining, utilities, construction, transportation, communications and financial services.
Working conditions	Women traders are exposed to violence and harassment (e.g. Burkina Faso and Ghana). Women street vendors are unorganized and isolated, and lack health, disability, unemployment and life insurance.	There are many home-based workers in India, and very poor working conditions for women in South Asia (e.g. limited ability to organize, particularly if home-based work; no access to social protection).	Women work as domestic workers and are exposed to exploitation, very low wages (e.g. Brazil) lack of social protection and social isolation.

Sources: **For sub-Saharan Africa:** Baden, 1998 (Ghana, Tanzania); Baden et al., 1994 (Ghana); Cotula, 2002 (Burkina Faso); Kabeer, 2008 (Eastern Guinea, Zimbabwe); Dolan, 2002; Newman and Canagarajah, 2000 (Uganda and Ghana); Sender, 2002 (South Africa); Cramer et al., 2008 (Mozambique); Whithead and Kabeer, 2001 (Ghana); **For Asia:** Chen et al., 2004; Kodoth, 2004 (West Bengal and Kerala); Kandyoti, 2002 (Uzbekistan); Wanasundera, 2006 (Sri Lanka); FAO, 2005b (Thailand, Indonesia, Vietnam and the Philippines); Maletta, 2008 (Afghanistan); Rozelle et al., 2002 (China); Srivastava and Srivastava, 2009 (India). **For Latin America:** Deere, 2005; Katz, 2003; Elbers and Lanjouw, 2001 (Ecuador); Lanjouw, 2001 (El Salvador); Ruben and Van Den Berg, 2001 (Honduras); Verner, 2006 (Argentina).

of workers, with no access to social security and limited potential to organize to ensure the enforcement of both international labour standards and national laws. In some cases, women providing unpaid contributions are often not even recognized as 'workers' and hence are seen as having no entitlement to workers' rights.

Rights and social dialogue

Despite the widespread commitment of many countries to respect and promote the principle of freedom of association, the effective recognition of the right to collective bargaining, the elimination of forced labour, the abolition of child labour and the elimination of all forms of discrimination in the workplace (including through ratification of a number of ILO Conventions particularly relevant to rural workers such as convention Nos. 11, 111, 129, 138, 141, 182, 184, and others), rural workers – and especially women and children – face both legal impediments and practical challenges in asserting their rights. According to a recent report of the ILO Committee of Experts on the Application of Conventions and Recommendations (CEACR), the problem of the exclusion of agricultural workers from relevant national laws and non-application of these in practice has been raised in 30 countries. Moreover, issues of violence, harassment, weak labour inspection mechanisms and non-recognition of trade unions concerning agricultural workers are quite common (ILC, 2008). For example, even where ILO provides technical assistance, many children

continue to work in commercial agriculture, plantations, forestry and the informal sector (ILC, 2008: 89). Also, despite the hazardous nature of the work and the high levels of risk, agriculture is often the least well-covered sector in the economy as far as national occupational safety and health regulations are concerned. There is an urgent need to document more fully whether all these problems affect rural female workers, both women and girls, more than male workers (as some evidence appears to suggest), and whether there are regional differences in the extent and intensity of these biases.

As for specific work categories where women are prevalent, the only ILO convention expressly targeted at home workers (Convention No. 177), for example, has been ratified by only a few developed countries. Legislative measures at the national level to provide basic labour rights for domestic workers remain limited to a handful of countries (e.g. South Africa) (United Nations, 2009).

A recent study by the ILO (Breneman-Pennas and Rueda Catry, 2008) shows that, globally, women's participation in institutions for social dialogue such as labour councils and advisory boards is still limited. By region, the average share of women participants is 35 percent in the Caribbean, 12 percent in Africa and 11 percent in both Asia and Latin America. The same review also finds that the institutions starting to include gender in social dialogue are about 57 percent in Asia, 33 percent in the Caribbean and in Africa, and 25 percent in Latin America (the scope of this inclusion varies considerably). However, the extent to which these institutions specifically represent the interests of rural workers is not indicated.

Trade unions in a number of countries are increasingly seeking to address the under-representation of women and their interests. The International Union of Food and Agricultural Workers (IUF), for example, has recently produced a gender-equality guide and aims to have all its committees composed of 40 percent women (Breneman-Pennas and Rueda Catry, 2008). There has also been an increase in the number of other more informal organizations promoting the rights of women workers, the best known of which is probably the Self-Employed Women's Association (SEWA) in India. However, these encouraging initiatives are still limited. Further research and action are much needed to foster institutional arrangements conducive to the effective and comprehensive realization of labour standards in rural areas for both women and men.

1.4.2. Gender gaps in earnings

Gender-disaggregated data on earnings from agriculture are very difficult to find. Most of the available, but still limited, evidence refers to wage work either in off-farm or non-farm activities. This partly reflects the fact that calculating labour earnings for self-employment is especially problematic because it requires undertaking complex calculations to separate the proportion of total self-employment income (which is what surveys usually report) between labour income and income attributable to returns from other assets. Moreover, under-reporting is a more acute problem for self-employment earnings than for wages. This is an area where improvement in statistics is especially needed. The Rural Income Generating Activities (RIGA) dataset used in Hertz *et al.* (2009), although a promising effort, is no exception to these problems.

Table I-9 shows, not surprisingly, that women are generally paid less than men. However, what is interesting is the extent of this gender pay gap, and the variations across countries and occupations.

TABLE I-9
Gender gaps in rural wages

Region	Sector	Type of employment	Wage unit	Women's wage as % of men's
Sub-Saharan Africa				
Ghana	Agriculture	Self-employment	Hourly	65
Senegal	Agriculture (NTAEs)	Wage	Hourly	Similar to men's
Kenya	Agriculture	Wage	Hourly	93
Tanzania	Agriculture	Wage	Monthly	69
South Africa	Agriculture	Wage	Hourly	84
South Asia				
Afghanistan	Agriculture	Wage	Daily	50
	Non-agriculture	Wage	Daily	20 to 30
Bangladesh	Agriculture (fry catchers and sorters)	Wage		64
India	Agriculture	Casual wage	Daily	69
	Agriculture	Regular wage	Daily	79
	Non-agriculture	Casual wage	Daily	65
	Non-agriculture	Regular wage	Daily	57
Pakistan	Agriculture (sugar)	Wage	Daily	50
Southeast Asia				
China	Non-agriculture	Wage	Monthly	68
Vietnam	Agriculture	Wage	Hourly	73
Latin America				
Costa Rica	Agriculture	Self-employment	Hourly	53
El Salvador	Agriculture	Wage	Hourly	82
	Agriculture	Self-employment	Hourly	63
	Non-agriculture	Self-employment		70
Mexico	Agriculture (NTAEs)	Wage	Daily	88
	Avocado		Daily	99
	Mango		Daily	78
	Cucumber		Daily	97
	Flowers		Daily	80

Sources: for Kenya (2005/2006) and South Africa (2004), Heintz, 2008; for Senegal, Maertens and Swinnen, 2009; for Tanzania (2000/2001), World Bank, 2007b; for Afghanistan (2003), Maletta, 2008; for Bangladesh (n.d), Gammage et al., 2006; for India (2004/2005), Srivastava and Srivastava, 2009; for Pakistan (2001), World Bank, 2006; for China (1995), Rozelle et al., 2002; for Vietnam (1997/1998), UNDP, 2002; For Costa Rica (2003), UNIFEM, 2005; for El Salvador (1996) non-agricultural employment, Lanjouw, 2001; for El Salvador (2003) agricultural employment, Heintz, 2008; for Mexico (1994), Deere, 2005.

Notes: For Pakistan, data refer to Punjab and Sindh only. Data for Costa Rica refer to 2003; for El Salvador to 1996 and 2003; for Mexico to 1994; for Kenya to 2005/2006; for South Africa to 2004; for Tanzania to 2000/2001; for Afghanistan to 2003; for India to 2004/2005; for Pakistan to 2001; for China to 1995; for Vietnam to 1997/1998; for Bangladesh the year is not available.

Gender gaps seem to be lower in some of the NTAE activities in Mexico and Senegal. Gender wage gaps vary even within a sector in a country – for example, in Mexico, women’s daily earnings are almost the same as men’s daily earnings in avocado production, but only 78 percent of men’s earnings in mango production. Differences in daily earnings may reflect gender differences in hours worked as well as differences in remuneration, which is why information on hourly wages is usually preferable (but more rarely available). Gaps appear to be largest for earnings from agricultural self-employment both in Africa (Ghana) and Latin America (Costa Rica and El Salvador). The sharpest gender differences in all forms of earnings are found in Afghanistan and Pakistan.⁸

1.4.3. A longer working day for women

Women work longer hours than men in most developing countries when both paid and unpaid work are taken into consideration. However, much of their work remains undervalued because it is unpaid and confined to the domestic sphere. Women often spend less time on average in paid market work than men, whereas they are largely responsible for water and fuel collection, food preparation, household chores, child care and care of the sick and elderly.

Table I-10 is from Horrell *et al.* (2008) and draws on the same surveys of Zimbabwe, Ethiopia, Uganda and India as in Table I-6. It shows gender patterns of time use in male-headed households where the man’s main activity is farming. Confirming patterns found in other developing countries, men appear to be working longer hours than women as far as the UN System of National Accounts (SNA) work is concerned.⁹ The difference in time spent farming and tending to the livestock is largest in Ethiopia, where men work double the time as women (eight hours per day for men compared with about four hours for women). In Zimbabwe, women and men spend on average the same time on agricultural work (about six hours). The pattern is reversed for housework: in all countries women work much more than men. In Ethiopia, in particular, women spend on average six hours on housework each day, while men do not do any of it.

Similar patterns can be found in many other countries for which time-use surveys are available. For instance, Table I-11 shows patterns of time use among the rural population of three other African countries. Women work at least ten hours longer than men every week when both SNA and non-SNA work are considered, but work between five and ten hours less than men in SNA work. In Benin, women appear to be working longer hours not only in non-SNA work but also in SNA work, mostly because of their water-collection responsibilities, which take them on average ten hours per week.

The average time spent on agricultural work also varies by employment status. As shown in Table I-12, in Brazil, El Salvador, Kenya and South Africa, weekly hours of work in

⁸ These patterns deserve further exploration. The data collected and presented here are too sparse and diverse to permit any generalization.

⁹ The UN System of National Accounts (SNA) recognizes as productive work the following categories: employment for establishments; primary production activities not for establishments such as agriculture, animal husbandry, fishing, forestry, fetching of water and collection of fuelwood; services for income and other production of goods not for establishments such as food processing, trade, business and other services. Water and fuel collection have been added only since 1993 but they are still often not included in measures of GDP in practice. Subsistence agriculture is, of course, also considered as part of SNA work. Food preparation, household maintenance, management and shopping for own household; care for children, the sick, the elderly and disabled; community services and help to other households are still considered ‘non-productive’ activities, and hence are not recorded. Only some countries record these activities but as separate ‘satellite accounts’. It is these activities that most gender-aware literature calls non-SNA work or extended-SNA work.

TABLE I-10

**Household time use in male-headed households (where men's main activity is farming),
Zimbabwe, Ethiopia, Uganda and India, around 2002**
(average hours per day)

	Zimbabwe		Ethiopia		Uganda		India	
	Female	Male	Female	Male	Female	Male	Female	Male
Sample	45	145	20	185	67	127	50	82
Hours spent on:								
Agriculture	8.9	9.1	3.9	7.3	5.0	5.2	1.9	3.6
Livestock	-	0.3	-	-	0.6	1.8	0.3	3.4
Other work	0.1	0.4	0.6	1.1	0.8	2.4	3.6	1.4
Housework	1.5	0.3	6.1	-	6.3	1.5	6.0	0.4
Relaxing	9.0	9.4	8.4	10.6	7.1	9.0	6.2	7.8
Travel					0.2	0.2	1.0	2.4
Within agriculture, hours spent on:								
Ploughing	0.9	1.3	-	-	-	-	-	-
Weeding	5.6	5.4	-	-	-	-	-	-
Preparing land	0.5	0.2	-	-	-	-	-	-
Manuring	0.1	0.1	-	-	-	-	-	-
Irrigating	0.1	0.1	-	-	-	-	-	-
Spraying	-	0.1	-	-	-	-	-	-
Within housework, hours spent on:								
Housework	0.6	0.1	1.7	-	5.5	1.4	2.2	0.0
Cooking	0.7	0.2	2.3	-	-	-	2.8	0.0
Fetching water	0.1	0.0	0.8	-	0.8	0.1	0.4	0.2
Fetching fuel	0.1	0.0	1.2	-	with water	with water	0.0	0.2
Collecting produce	-	0.1	-	-	-	-	-	-
Within other work, hours spent on:								
Buying/selling provisions	-	-	0.4	0.7	-	0.2	0.4	0.3
Paid work – on farm	-	-	0.0	0.0	0.1	0.2	3.2	0.9
Paid work – off farm	-	-	-	-	-	0.6	-	0.2
Own business	-	-	-	-	0.7	1.4	0.2	0.1

Source: Horrell et al., 2008. Table 3.2: p.36.

agriculture tend to be lower on average for the self-employed and for contributing family workers, both females and males, than for wage workers. In Brazil and El Salvador, the gender gap in hours worked is more pronounced among the self-employed, in the sense that women in this category appear to work significantly fewer hours than men relative to other categories of workers. Unfortunately, the study from which the table is taken does not report hours spent on housework and child care by the same groups of workers, but it is likely that this larger gender gap in self-employed hours can be attributed to the fact that a large share of women in this form of employment have young children to look after and hence devote less time to paid work. Other forms of employment, such as regular wage work for an enterprise, would not allow the same time flexibility to combine reproductive and productive tasks.

In conclusion, the main objective of section I.4.3 has been to stress that a fully gendered account of decent work and rural livelihoods requires consideration of time burdens in both unpaid and paid work, and an understanding of how these interact. All rural livelihoods involve domestic labour to maintain and reproduce the household over time.

TABLE I-11

Average hours per week spent by the adult rural population on SNA and non-SNA work in Benin, Madagascar and Tanzania

(various years)

	Benin		Madagascar		Tanzania	
	Female	Male	Female	Male	Female	Male
SNA work*	35.6	33.3	28.0	42.0	33.1	38.8
includes water and fuel collection	9.9	2.4	4.7	3.1	4.4	1.4
Non-SNA work*	22.7	7.6	24.5	4.7	29.2	9.5
Total work	58.3	40.9	52.5	46.7	62.3	48.3

Source: Valodia and Devey, 2005 (for Benin and Madagascar); Tanzania National Bureau of Statistics, 2006 (for Tanzania).

Note: Data refer to 1998 for Benin, 2001 for Madagascar and 2005 for Tanzania. For a definition of SNA/non-SNA work, see footnote 9.

TABLE I-12

Average hours per week in informal agriculture by gender and employment status in Brazil, El Salvador, Kenya and South Africa

(about 2005)

	Brazil		El Salvador		Kenya		South Africa	
	Female	Male	Female	Male	Female	Male	Female	Male
Wage work	40.5	46.2	40.8	38.0	35.1	44.6	47.9	51.9
Self-employed	29.4	45.7	31.0	37.5	30.7	31.1	22.9	26.9
Contributing family workers	28.7	34.0	33.0	36.0	29.3	23.4	-	-

Source: Heintz, 2008.

Note: Data for Brazil refer to 2005, for El Salvador to 2003, for Kenya to 2005 and for South Africa to 2004.

As a standard practice, studies should be analysing data on unpaid work alongside information on paid employment and farm production, but very few to date do so.

1.5. Rural employment, gender and poverty

Remunerative employment is one of the most important channels through which the living standards of poor women and men can be improved. Many rural workers remain poor because they receive low earnings and live and work in precarious conditions, are vulnerable to health and other shocks and have little access to risk-coping mechanisms such as insurance or social assistance; in other words, they only have access to 'indecent' work. ILO data (ILO, 2009a) show that in 2007 the overall working poverty rate was 58 percent in sub-Saharan Africa, 47 percent in South Asia, about 16 percent in Southeast Asia and 7 percent in Latin America. Rates may be even higher in rural areas but unfortunately data are not easily available to confirm this point. Working poverty rates are determined at the level of the household. Hence, it is important to complement this information with analysis of employment dynamics, which focus on the individual. A full gendered picture can only be gained by intersecting the household structure with the employment structure.

In most countries, women tend to be more vulnerable workers than men because they face many biases in both rural labour markets and within households, and therefore have fewer opportunities than male workers to diversify into better-quality employment. In some family settings, they may also have weaker claims over what they earn.

The linkages between employment, poverty and gender inequality are complex and require an understanding of how household dynamics and labour market processes interact. The relationship between poverty and women's employment runs in both directions. Poverty can push women into employment – the so-called 'distress sale of labour' (Elson, 1999) – often in informal and poorly paid jobs (a vicious circle). On the other hand, women's employment income often makes a critical difference in the poverty status of their households. However, this does not necessarily mean that the individual situation of the woman concerned improves at the same time, because household income may not be distributed according to the amount of time each member contributes to its generation. Attention should be given to separating out individual from average household well-being impacts, which may differ because of unequal distribution of rights, resources and time between women and men. Policies for rural employment and development must give due consideration to women's bargaining position in the household and in the labour market. Poverty is linked to weaker incorporation in both.

Poverty can push women into employment, often in informal jobs. In most developing countries, women often seek wage employment in response to economic crises and difficult family circumstances, such as separation and widowhood. Agricultural casual wage work often appears to be the only available employment option for poor rural women (more than for poor rural men). Being crowded in a limited number of occupations and lacking start-up assets, poor women enter the bargaining process with their employers in a weak position. Vulnerability may force them to sell their labour well below market rates. Measures to support the full enforcement of labour standards, to protect women's rights over their own financial assets and to assist them in mobilizing for a fair remuneration of their contributions, as envisaged in the Decent Work Agenda, thus become crucial.

Whitehead (2008) offers examples from West and East Africa. Evidence from Southern Africa corroborates these patterns. In Mozambique (Cramer *et al.*, 2008), a high share of female wage labourers are single heads of households. In-depth interviews indicate that women who are widows or divorced have greater difficulties in accessing decent jobs. Their weak bargaining position means that they often have to accept irregular wages and receive few, if any, benefits. In Zimbabwe, casual female wage labourers were hired for shorter periods of time than casual male labourers. They earned less than men and were more likely to be paid on a daily rather than on a monthly basis. Households headed by female casual workers were among the poorest households. Their children were more likely to be underweight (in 40 percent of the cases compared with 26 percent for other households) (Adams, 1991). Adams' study is rather dated, though, and would need to be revisited, especially in light of the crisis Zimbabwe has experienced in the last years. A study of South Africa from the mid-1990s shows that women working in the export fruit farming sector who had children were largely seasonal workers and 70 percent of them had experienced food shortages at least one time in the 12 months preceding the interviews (Barrientos *et al.*, 1999). The situation has evolved in South Africa too, in terms of both economic developments and legislation, and an update of this analysis would be very useful.

Evidence from South Asia also shows that rural women from poorer households are more likely to take up paid employment, particularly as wage workers, than women from wealthier families (Das and Desai, 2003 and Srivastava and Srivastava, 2009). For example, in Pakistan, women from landless households, or from sharecropping households, have higher levels of participation in agricultural wage labour and work longer hours than women in landowning households (Sathar and Desai, 1996 quoted in Kabeer, 2008).

Women's employment income can make a critical difference in the poverty status of their households. A much quoted study for Ghana and Uganda (Newman and Canagarajah, 2000) shows that poverty rates for female-headed households engaged in non-farm activities declined faster than poverty rates for other households. In Ghana, for instance, female-headed households combining both farm and non-farm work experienced a 37 percent decline in poverty compared with a 14 percent decline for male-headed households with similar characteristics over the 1987–1992 period. The study finds that women in Ghana are more involved in non-farm activities than in farming, while the reverse holds for Uganda. In both countries, high shares of non-farm employment performed by women are associated with higher overall household income. This would suggest that the ability of women to diversify out of agriculture may provide an effective pathway out of poverty, but these findings should be taken with caution as the time period over which changes were analysed is rather short (and the study dated).

A study of Vietnam (Kabeer and Tran Thi Van Anh, 2002) offers similar findings. Rural women's ability to diversify out of farming was more strongly associated with household well-being than that of men's. Diversification into off-farm activities, rather than diversity *per se*, explained higher levels of household income. The study also suggests that, despite women's longer hours of work in domestic and child care activities, marginal returns to their off-farm activities were similar to those of men.

All these findings are very context-specific, and sounder evidence is needed to substantiate these claims. Rural non-farm work can be very diverse and, as discussed in earlier paragraphs with regard to the case of Mozambique, female members of the poorest households may be lacking the resources to participate in the most profitable activities.

As for the impact on other household members, substantial evidence (outlined in Salazar and Quisumbing, 2009 but also in earlier anthropological literature) shows that women's access to economic resources increases the share of household expenditures devoted to collective goods benefiting all household members (in particular the well-being of children) than income earned by men, who tend to use it more often to meet personal needs (Whitehead, 1981). However, the impact of women's access to paid labour more specifically is more mixed (evidence presented in Salazar and Quisumbing, 2009) because of the presence of two opposite effects: a positive effect due to an increase in household income associated with mothers' paid work, and a negative effect due to a possible decline in the time devoted to housework and child care. These considerations suggest that attention needs to be paid to the type of employment obtained by women and the intensity of their work.

When household income increases as a result of women taking up paid employment, this does not necessarily mean that the individual situation of the woman concerned improves at the same time. For instance, a study of Kenya (Kennedy, 1994) shows that increased participation of women in sugar production brought about significant income gains in overall household income and food consumption. However, women's direct control over income from the new cash crop was much less than that of men. Increases in women's own income were associated with decreases in their body mass index, because additional work and greater energy intensity of activities exceeded the concurrent increase in their caloric intake.

1.6. Emerging trends

The flows of trade, capital, labour, technology and information across countries have accelerated in recent decades, but not all countries are benefiting in the same way. The gendered structure of employment is evolving in response to these processes of globalization. There are emerging research and policy issues, and this section reviews some of the available evidence and suggests areas for further analysis.

Some of the dynamics likely to influence rural families, their livelihood strategies and gender relations are: (a) greater economic vulnerability of smallholders to global market forces as international trade in high-value non-traditional agricultural products is increasing and increasingly dominated by large agribusiness, inputs into commercial agriculture often become more expensive and food becomes less efficient to produce; but also greater off-farm employment opportunities generated by NTAEs; (b) increased migration which, if mostly undertaken by men, would leave women in rural areas with the main responsibility of providing for their families and, if undertaken by women, may also contribute to alter conventional gender roles and responsibilities within rural communities (as documented, for example, in Thangarajah, 2003 and Parrenas, 2001); (c) the HIV/AIDS pandemic, leading to labour shortages and heavier care burdens in rural areas; (d) climate change; and (e) the recent food, fuel and financial crises, which are affecting different groups of countries in different ways and are expected to cause increases in working poverty and vulnerable employment worldwide (ILO, 2009a).

1.6.1. International trade

Trade expansion and liberalization can affect rural employment, food security and poverty in multiple ways: directly, through either agricultural export growth effects or import displacement effects (or both), and indirectly, through changes in other trade-related

activities such as processing and packaging of agricultural exports. The resulting gender-differentiated employment effects vary depending on the socio-economic structure of the country concerned – in particular on which crops women produce relative to men, and the extent of gender discrimination and segmentation of rural labour markets. Some of these dimensions are better documented than others.

Rural women and men can be involved in the production of goods traded in global markets either as farmers, wage workers or intermediaries (processing or selling products) at any node of the value chain. Commercial agriculture can include both staple crops and high value products. High-value agriculture involves a wide range of products such as vegetables, fruits, shrimps, nuts, poultry and non-food products such as cut flowers. The list continues to expand as new uses or added values are found for traditional products. A great variety of institutional arrangements characterizes production for export across regions, countries and even within a sector or value chain.

Fresh fruits and vegetables are among the fastest growing of all traded agricultural exports. Their production is heavily concentrated among a few middle-income countries in Latin America: Argentina, Chile and Mexico. Chile, Costa Rica, Ecuador and Mexico account for 43 percent of developing-country exports of fresh fruit while Argentina, Chile, Mexico and Syria provide 67 percent of fresh vegetables. Guatemala and Kenya are the main world producers of green peas (Diop and Jaffee, 2005, quoted in ILC, 2008). A growing body of research has been documenting various developments in these sectors, and some of the studies (but not many) also have paid attention to their gender implications, most notably Dolan and Sorby (2003).

Global value chains could offer in principle an opportunity for generating quality employment for rural women and men, but they can also be channels for transferring costs and risks to the weakest nodes, especially to women. As far as producers are concerned, emerging trends seem to indicate that small farmers are often not in a position to compete in overseas markets (while frequently having to compete with foreign food imports in the domestic market). They face a particular set of constraints relating to land tenure systems, poor infrastructure, lack of credit, and lack of access to technology and other resources. These constraints are gender-intensified.

Poor farmers in many developing countries are increasingly abandoning or selling farms, leading to land concentration in the hands of a few large commercial enterprises, including foreign companies. For example, in the early 2000s many small dairy farmers in Brazil abandoned the sector, while in Guatemala a farmer cooperative experienced a severe reduction of tomato producers (Reardon, 2003, quoted in Beviglia-Zampetti and Tran-Nguyen, 2004). As we have seen in section 3.2, women are over-represented among small farmers. In the Philippines, a study reports that female farmers are being pushed by large NTAE businesses into increasingly less fertile land or even being displaced to cities and tourist zones, where they may work as domestic workers or sex workers (Beviglia-Zampetti and Tran-Nguyen, 2004).

Medium-sized and large-scale commercial farms are in a better position to take advantage of the expansion of agricultural traded goods, but these are mostly owned and managed by men. In Mozambique, Samoa and other sub-Saharan African countries, further evidence can be found that independent female producers experience more constraints in accessing international markets than male producers, and that women traders are often confined to local markets (Carr, 2004).

Even if not directly involved, women often increase the amount of time they contribute to their husbands' commercial crops, leading to higher female unpaid work burdens. In spite of their significant contribution to family crops as unpaid labour, women often have no control over the income generated from their work, as studies on NTAEs in India, Kenya and Senegal show (for the Indian Punjab, Singh, 2002; for Kenya, Dolan, 1997; for Senegal, Maertens and Swinnen, 2009). The effects of the expansion of agricultural exports vary evidently also with the gender intensity of the crops involved, but this may itself be endogenous. There is evidence, for example, that even when a crop is traditionally female-intensive, commercializing it causes men to enter the sector and take over production. This was the case for groundnuts in Zambia (Wold, 1997), rice in The Gambia (von Braun *et al.*, 1994) and leafy vegetables in Uganda (Shiundu and Oniang'o, 2007).

Poor households, and particularly poor women, seem to be benefiting from incorporation into international trade more through labour markets (i.e. increased employment opportunities on estate farms or packing houses) than through product markets. Wage employment in non-traditional agro-export production has emerged as a significant source of employment for rural women, particularly in Latin America, in countries such as Brazil, Chile, Colombia, Ecuador, Mexico and Peru as well as in some sub-Saharan African countries such as Kenya, South Africa, Uganda, Zambia and Zimbabwe and, more recently, Ethiopia. However, NTAE sectors remain small and employ a relatively small share of the rural labour force. Further details are provided in Table I-13.

In NTAEs, women wage workers appear to be working in more precarious positions than men. For instance, in South Africa, women are 69 percent of temporary workers (Barrientos *et al.*, 1999), and in Tanzania, women comprise 85 percent of the casual workers planting, harvesting and grading on flower farms, while men occupy managerial positions (ILO, 2003). In Bangladesh, exporters of shrimp (mostly men) realize more profits than fry catchers. Women fry catchers and sorters earn about 64 percent of what men earn and are found in the most insecure nodes of the shrimp chain (Gammage *et al.*, 2006). Working conditions in packing plants in the lemon sector in Northern Argentina remain rather poor, particularly for women, despite increasing pressures to comply with better standards for business owners (Ortiz and Aparicio, 2007).

Women's wages in NTAEs tend to be lower than men's, but often higher than the agricultural wage they could earn in other non-export-oriented sectors. Recent studies focusing on bean and tomato production in Senegal (Maertens and Swinnen, 2009) and banana production in Ghana (Beviglia–Zampetti, 2004) show that permanent female workers employed in these sectors receive the same treatment as permanent male workers. However, a much smaller share of female workers than male workers has permanent status in these sectors. Further research on ways in which women could be included more equitably in NTAE employment is of great policy relevance.

1.6.2. Migration

Migration from rural areas is increasingly becoming an important livelihood strategy. Migration involves moving to another area of the country or another country on a long-term or short-term basis. Migration often occurs because of lack of economic opportunities, land shortages and poor infrastructure in rural areas, perceived better employment prospects elsewhere and improved communication. Although attention has focused on those who migrate, less attention has been given to those left behind, many of whom are women and children in most regions.

TABLE I-13

Employment in high-value agricultural export production by region

(data mostly from the 1990s)

Regions/countries	Sector	Total number of workers (including men and women)	Female intensity (percent)	Demographic characteristics
Sub-Saharan Africa				
Kenya	Cut flowers	40 000	75	-
	Vegetables	20 000-32 000	66	-
Senegal	French beans	-	90	-
	Cherry tomatoes	-	60	-
South Africa	Fruit	280 000	53	90% of women working in fruit production had children, most of whom were younger than five
Uganda	Cut flowers	3 000	75-85	-
Zimbabwe	Cut flowers	27 000	70-87	-
South Asia				
India, Punjab	Tomatoes	-	60	-
Latin America				
Argentina	Citrus fruit	23 557	-	Only a small percentage of labourers are female (specific to the lemon orchards in Northern Argentina).
Brazil	Fruit	-	65	-
	Poultry	-	90	-
Chile	Fruit	336 739	45	Mostly married rural women. Young single women represent 35% of women employed in the industry.
Colombia	Cut flowers	110 000	65	Four out of five households relying on the flower industry as their main source of income are headed by women.
Dominican Republic	Unspecified	-	-	More than 30% of women working in the NTAE sector are single heads of households and most of them have young children.
Ecuador	Cut flowers	30 000-50 000	50-70	-
Mexico	Cut flowers	-	70-80	Mostly young single women
	Vegetables	1.2 million	50-90	-
Peru	Vegetables	60 000	70 (field)	-
			95 (processing)	

Sources: Dolan and Sorby, 2003 for Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Kenya, South Africa, Uganda and Zimbabwe; UNRISD, 2005 for Punjab; Fern, 2008 for Peru; Ortiz and Aparicio, 2007 for Argentina.

Note: (-) means not available. Contract labour means that both males and females are hired by third-party contractors.

The effect of migration on the employment opportunities and well-being of those who stay behind is ambiguous. Out-migration of labour from agriculture might reduce crop production and undermine food security. On the other hand, remittances may facilitate on-farm investment or relieve credit constraints that prevented farmers from purchasing key inputs. An important policy question is thus whether remittances support production enough to compensate for the reduced availability of male or female labour and can improve intra-household welfare (through better education of children, a decline in women's workload and so on). For instance, does out-migration increase the incidence of female-headed households? And, as some evidence from Africa seems to suggest (Adams, 1991 for rural Zimbabwe, and Dolan, 2002 for Uganda), are these female-headed households more able to engage in decent and productive work relative to other female-headed households with no migrants among their family members? Significant gaps in knowledge remain with relation to the effects of migration on rural employment opportunities and gender roles.

Gendered employment effects – those who migrate

Although data are sparse and trends are not well documented, migration patterns seem to have gender characteristics, with men migrating more frequently than women, especially internationally. A few countries in Asia provide exceptions to this pattern. In Sri Lanka and in the Philippines, female migrants are about 74 percent and 55 percent of total outflows, respectively (UNRISD, 2005). It appears that the number of women migrating as independent workers is steadily increasing in other countries as well.

Data on rural-urban migration from the 1970s (Singelmann, 1993) show higher shares of men relative to women in most of sub-Saharan Africa and South Asia but higher shares of women relative to men in Southeast Asia (particularly in the Philippines, Thailand and Indonesia) and Latin America. These trends appear to have continued in recent decades.

Female and male migrant workers tend to cluster in different occupations. Women often work as domestic workers, nurses and sex workers, or find employment in export-oriented garment factories in urban areas (evidence of this can be found in Bangladesh [Zohir, 1998], China [Davín, 1996 and Fan, 2003], Malaysia [Kusago, 2000] and Nicaragua [Espinoza Gonzales, 2008]). In other cases, they migrate to other rural areas to take up jobs in NTAEs (Dolan and Sorby, 2003). Male migrants work in construction, transport and trading and tend to travel further away from their homes than female migrants. The experience of migration for work tends to be more short-lived for women than for men in some countries, as at times marriage brings an end to it, as documented, for example, for China (Zhang *et al.*, 2004).

Wages of female migrants appear on average to be lower than wages of male migrants. There is variation in the share of earnings that migrants send back home and in the use of remittances – these too seem to be gender-differentiated: paying for the education of younger siblings is a more important priority for female migrants, for instance, in Bangladesh (Zohir, 1998), the Philippines and Thailand (Paris *et al.*, 2009). But the evidence is mixed on this point. For example, a recent study of rural Mexico (Pfeiffer and Taylor, 2007) finds that households with female migrants spend less on education than similar households with no female migrants among their members.

Gendered employment effects – those who stay behind

Few studies document how migration affects the livelihood strategies of the household members left behind. The impact seems to vary depending on whether the family member who migrates is female or male, on the duration of migration and the type of employment. For example, rural women who migrate as seasonal casual labourers to work in agribusiness are found to be unable to contribute to improve their family's well-being and/or enhance their personal situation in India (Jackson and Rao, 2004) and Zimbabwe (Adams, 1991).

When men migrate, the household members left behind must either hire labour or substitute for male labour. Scattered evidence from sub-Saharan Africa suggests that male out-migration may intensify women's workload in agriculture and contribute to women taking up traditionally male farming tasks. In South Africa, for example, when men migrate, women must also clear the land for planting (Mtshali, 2002), and in Malawi 45 percent of the women interviewed were performing tasks once handled by men (Deshingkar, 2004). These women were already over-burdened and remittances were too low to hire labour.

A comparative study of Southeast Asia (Paris *et al.*, 2009) shows that, in Northeast Thailand, as a result of male migration, a higher proportion of family members contributed to rice production, but more labour was also hired. In the Philippines, the proportion of hired labour was higher than family labour, and hired female labourers substituted for wives' labour. In North Vietnam, rice farming was dominated by female family labour, particularly in households with migrants. In all such cases, remittances were used to pay for farm inputs and/or hiring of labour, thus maintaining productivity. In the Philippines and Thailand, the absence of principal males and sons did not increase women's workload because female household members used remittances for hiring labour for land preparation, spraying of chemicals and other heavy tasks. In Vietnam, wives appear to have taken on additional responsibilities such as fertilizer and pesticide application and land preparation, which are typically male tasks. Some of the female farmers shifted their roles from unpaid family labourers to managers.

In rural China, as agriculture becomes less important than non-farming activities as a source of income and men increasingly migrate to urban areas, women undertake most of the farming activities, including management. However, they still have less decision-making power than men within households and their community (Song *et al.*, 2009).

In areas where sociocultural gender norms are very rigid, women withdraw from agricultural work or other types of rural employment as a result of male migration, reinforcing the gender division of labour between productive and reproductive spheres. Evidence of this is found in rural Armenia and in Guatemala (Menjívar and Agadjanian, 2007) and in parts of South Asia (Kerala, India and Muslim communities in eastern Sri Lanka, [Jackson and Rao, 2004]).

In rural Mexico, male international migration, and hence higher remittances, appears to have been associated with gender-differentiated labour supply behaviour among those who stay behind. Women in families receiving remittances withdraw from paid work – mostly from poorly paid occupations in the informal sector, whereas men who remain in rural areas appear to shift from formal-sector jobs to the informal sector (Amuedo-Dorantes and Pozo, 2006). A reason for this behaviour is hard to find. A more recent study (Appendini, 2009) finds that women who stay behind appear to have ambiguous

feelings about their situation, enjoying greater independence in decision making in some instances, but also feeling further overburdened with family responsibilities.

The effects of female migration on subsistence production and food security as well as on rural labour markets are documented even less than the effects of male migration. As for the impact of women's migration on subsistence production, a recent study (Pfeiffer and Taylor, 2007) finds that neither female nor male migration has any effect on the propensity to produce staple crops in rural Mexico, but that non-staple crop production responds negatively only to male migration.

If women migrate, their husbands often find it difficult to take on responsibility for child care and household work. For example, Toltstokorova (2009) reports frequent cases of anti-social behaviour among (mainly unemployed) husbands and adult sons in Ukraine. It is usually other female household members left behind, particularly old relatives, who take on more unpaid work in addition to their own, following female international migration, as documented in studies of rural China (Luo, n.d.), Vietnam and the Philippines (Paris *et al.*, 2009). In the Philippines, some female household members were able to move from unpaid subsistence agricultural work to running small businesses (e.g. Sari-sari stores) thanks to remittances from their female relatives (IFAD and INSTRAW, 2007).

1.6.3. HIV/AIDS

In 2007, 33 million people were estimated to be living with HIV in the whole world. Sub-Saharan Africa accounts for 67 percent of people with HIV and for 75 percent of AIDS-related deaths. Countries especially affected include: South Africa, Botswana, Lesotho, Namibia, Swaziland, Zambia and Zimbabwe. Women account for nearly 60 percent of HIV infections in sub-Saharan Africa (UNAIDS, 2008). HIV infection rates in rural areas are hard to measure and likely to go unreported. While early outbreaks of the disease occurred predominantly in urban areas, the majority of people living with HIV/AIDS are now in rural areas, as a result of many male migrant workers with AIDS symptoms returning to their villages (see for example FAO, 2004 for Zambia and ODI, 2005).

HIV/AIDS affects rural households and rural employment in multiple ways. Many rural households appear to experience labour shortages for farm work, with serious implications for agricultural production and food security. The extent to which HIV/AIDS-affected households may diversify into non-farm jobs is not known. HIV/AIDS also has significant indirect effects on rural employment through restrictions on female labour availability, as women's productive time is diverted to taking care of the sick.

All these changes appear to be markedly gender-differentiated. Adult men may often be the first to be affected in a household and the first to die (UNAIDS, 2008; Rugalema, 1999). When men are sick, women may attempt to maintain farm production by taking over farm tasks previously performed by their husbands. In Zambia, for example, wives with sick husbands or those recently widowed took over male tasks (e.g. ploughing) while retaining responsibility for all domestic activities and nursing sick household members (FAO, 2004). Occasionally, women received help from relatives but in most cases they hired male labourers to prepare rice fields in exchange for home-produced beer. In many cases, however, cash crops are abandoned when adult males fall sick or die (Topouzis, 1994 for Uganda; Yamano and Jayne, 2003 for Kenya). Widows may come under pressure to leave the fields to their husband's family (Strickland, 2004 for Kenya, Lesotho, Malawi,

South Africa and Tanzania). This severely restricts women's ability to work as independent farmers and to meet household food needs through their own production.

When women are sick, men may not be available to take over female tasks in farm production (such as weeding). For example, in Zambia (FAO, 2004 and Waller, 1997), most male-headed households either sought help from other adult female relatives or, more frequently, relied on their children's work.

As for the impact of HIV/AIDS on the care burden, there is ample evidence that women disproportionately carry the burden (Akintola, 2008 for South Africa; Chimwaza and Watkins, 2004 for rural Malawi; Lindsey *et al.*, 2003 for three districts of Botswana; FAO, 2004, Waller, 1997 and Bangwe, 1997 for rural Zambia; Opiyo, 2001 for Western Kenya) which adds to already heavy workloads. Having to care for their sick relatives reduces women's capacity to engage in paid work, in both farm and non-farm activities. A few studies document the negative impact of increased care-giving responsibilities on women's agricultural labour supply. In Bukoba district, Tanzania, women spent 60 percent less time on agricultural activities if their husbands were ill (Rugalema, 1999). In Ethiopia, women in AIDS-affected households spend between 12 and 16 hours per week on agricultural activities. This compares with 34 hours for women in non-AIDS-affected households (Bollinger *et al.*, 1999). In Southern Zambia women had to withdraw from agricultural work altogether (Waller, 1997).

The impact of HIV/AIDS on women's and men's rural non-farm activities is little investigated. In response to HIV/AIDS and declining agricultural production, rural households may seek non-farm employment opportunities. However, because women are overburdened, they may no longer have time for non-farm activities, such as artisan crafts, market gardening and food processing, that previously contributed to the family budget (Opiyo, 2001 for Western Kenya and FAO, 2004 for Northern Zambia). They may be forced instead to enter the worst forms of paid work in order to feed their families or raise money for medicines. Sparse evidence suggests that some women in HIV/AIDS-affected households resort to commercial sex (Fleischman and Morrison, 2003; Gillespie, 2006).

The HIV/AIDS epidemic also significantly affects children's work. Some plantations in Zimbabwe hired children in place of their dead parents to help them survive (ILO, 2003). It has also been reported that bonded and forced labour of children is on the increase on South African farms, where children inherit family obligations when their parents die (*ibid.*). Moreover, AIDS-affected households often take children away from school, especially girls, so they can take care of sick family members and younger siblings (Kipp *et al.*, 2007 for rural Uganda; Grant and Palmiere, 2003 for rural Zimbabwe).

Female-headed households affected by HIV are likely to be more vulnerable to poverty than male-headed households. For example, in the northern province of Zambia, female-headed households were found to have about three times as many orphans as male-headed households, owned fewer physical assets and fewer small ruminants, had the lowest average land available per person and suffered from shortages of labour (FAO, 2004).

1.6.4. Is there a feminization of agriculture?

Since the 1990s, a number of studies on gender and rural employment have been pointing to the 'feminization of agriculture', attributing it partly to the trends described in the previous sections. The term 'feminization of agriculture' can mean different

things and should be used with care. It refers broadly to women's increasing presence (or visibility) in the agricultural labour force, whether as agricultural wage workers, independent producers or unremunerated family workers. Others use the term to indicate deterioration in the quality of agricultural work (e.g. Standing, 1999). Evidently, the forms and conditions under which women are incorporated in agricultural employment matter for gender equality and poverty outcomes – feminization of casual agricultural labour is not the same as feminization of farm management. It also matters whether an increase in the share of women in the agricultural labour force relative to men is because more women are becoming economically active in agriculture or because fewer men are working in the sector.

Extra caution should also be used in interpreting higher rural female participation rates as true 'feminization', as these higher rates may be simply a reflection of women's contribution to agriculture starting to be better counted in standard statistics. The evidence is patchy and anecdotal in most countries and regions. Statistics over time are rarely available, making the task of answering this question even harder.

It is important to understand the processes behind the numbers. As sections 5.1, 5.2 and 5.3 illustrate, asking about the factors leading to gender-differentiated changes in rural employment is a more fruitful policy question than simply quantifying the extent of such changes.¹⁰ Different contexts will require different types of interventions. What the earlier sections show is that the level of influence and strength of different drivers vary by region and sub-region and that there may be intersecting processes and tensions between offsetting effects. The HIV/AIDS epidemic has a much stronger negative impact in Southern Africa than in any other region. Migration seems a more significant phenomenon in Southeast Asia and Latin America (where the diversification of the rural economy appears more advanced, at least in some regions, and where women seem to be taking on farm management responsibilities in some cases) than in South Asia or sub-Saharan Africa. International trade seems to be affecting most regions, but each region and country in different ways, depending on the socio-economic and institutional structures of the countries concerned. For example, the increased demand for female labour in the agricultural wage labour market as a result of expanding non-traditional agricultural exports is affecting Latin America the most, and to a lesser extent some countries in India and sub-Saharan Africa.

1.6.5. New challenges

Other processes and events, such as climate change and the recent global food, fuel and financial crises, pose significant new challenges to the achievement of poverty reduction and gender equality in the rural world. These processes are not sufficiently documented yet to permit any sound assessment. Thus only a few tentative considerations can be made.

Climate change

One effect of climate change relevant to rural employment is related to the risk of declining farm yields. The resulting gender-differentiated impact will depend on multiple factors, including which crops women produce, as well as their ability to adapt and respond.

Female farmers' ability to develop effective coping strategies might be limited compared with male farmers because of their more restricted access to productive resources such

¹⁰ A rigorous and comprehensive quantification is much needed too.

as technology, knowledge and inputs. There is, however, some evidence that some women are adapting to the changing climate by shifting cultivation to flood- and drought-resistant crops, crops that can be harvested before the flood season or varieties of rice that will grow high enough to remain above the water when the floods come (BRIDGE, 2008). Climate change might worsen the conditions of wage agricultural labourers if, in response to it, large producers expand informal employment and increase the use of pesticides. Climate change might also increase women's unpaid workload, further reducing their opportunities for paid employment, in areas affected by desertification where time required for water collection might increase.

Both mitigation and adaptation policies are likely to have gender-differentiated effects on employment that need to be better understood. For instance, environmental labelling, if discouraging the purchase of fruit and vegetables from developing countries, may have negative employment effects on female-intensive non-traditional agricultural export industries. Climate policies can contribute to rising demand for educated and qualified workers through promoting environmentally sound technologies. However, because of women's lower levels of education in many countries, women are less likely to benefit from such demand unless the relevant training is made available to them.

The financial, food and fuel crises

The financial crisis, which started in 2008 in developed countries, is already having an impact on developing countries through reduced trade flows, declining commodity prices, tightening of credit markets for both private and public sectors, lower remittances flows, declining foreign direct investment and official development assistance, and, more broadly, greater uncertainty. Not all developing countries are being affected in the same way and through the same channels. It is predicted that some of the Asian countries (except China and India) and most sub-Saharan African countries will be hit the hardest, whereas Latin America seems the region best equipped institutionally to cope with the downturn (ILO, 2009a). The financial crisis arrived at a time when many people in developing countries were already facing hardship because of the food and fuel crises. While the prices of food and fuel have declined since mid-2008, they nonetheless remain higher than in 2007 and have not dropped in all locations, indicating that those crises are not over either. (The OECD–FAO, 2008; FAO, 2008a; FAO, 2009b)

The effects of the three crises are likely to offset each other in some cases but to reinforce each other in other cases. The vulnerability to food, fuel and financial shocks is likely to vary widely across developing economies, depending on the extent of their integration with the global markets through trade and capital flows, their shares of food and energy imports and their within-country inequality. Policy responses to protect and extend decent work for both women and men in these circumstances must recognize the heterogeneity of effects across and within regions.

There is no clear evidence to date as to whether employment in rural areas is being more negatively affected than employment in urban areas, as this is context-specific and depends on a range of factors and pre-conditions.¹¹ Nor is it possible to know conclusively whether rural job losses will be greater among women than among men. In a recent analysis of overall trends in developed economies, the ILO (2009b) identifies three groups

¹¹ Data from past financial crises indicate that non-agricultural sectors have declined faster than the agricultural sector in Asia and Latin America (source Heady in recent IFPRI PP presentation by Ousmane Badiane on IFPRI website: Implications of the financial crisis for developing countries, 30 April 2009).

of countries: a group in which the employment impact of the crisis does not seem to be visible as yet (e.g. the Netherlands and Poland); a group experiencing job losses but where gender effects are ambiguous (e.g. Australia and Canada); and a third group displaying a rapid deterioration of labour market conditions, with higher unemployment rates for males than for females (e.g. France and the United States).

The employment effects of the crisis in the rural developing world will be contingent on the particular economic structures of different countries and on the sectors in which women and men work. For example, in countries where export sectors are female-intensive (e.g. NTAEs), rural women will disproportionately bear the loss of jobs. There may also be differences in impact between employment related to food such as vegetables and work opportunities in sectors producing luxury goods such as flowers, the demand for which can be expected to decline faster. In countries where minerals are key exports or where the construction sector is large, men will suffer the most (these sectors are often male-dominated). Male and female migration from rural areas to the cities, or to other countries, may also be affected differently, depending on the sectors in which workers are employed (for example, depending on whether, in receiving areas, the demand for construction workers, which is mostly a male job, will decline more than the demand for domestic workers, generally a female occupation). Rural women micro-entrepreneurs could also experience negative impacts from restrictions on the availability of credit since they tend to be the majority of microfinance clients.

It is plausible to predict that in most countries women will be expected to assume the primary responsibility for acting as safety nets of last resort and for ensuring that their families will survive (Elson, 1991 and 2002). Rural women's unpaid work burdens are likely to further intensify, especially in low-income households, imposing significant costs and limiting further their ability to participate on decent terms in the paid labour market (as documented for instance in FAO, 2009b). It is possible that rural women, more than rural men, will be increasingly offered precarious employment with low prospects and that their children's health as well as their own health will deteriorate. During Mexico's 1995 crisis, for example, infant mortality rates increased most in the areas where women's work participation increased, with girls being affected the most (Cutler *et al.*, 2002). Moreover female workers, being on average less educated, may be less prepared for more remunerative employment involving the use of the new technology needed to ensure a 'green' recovery. Sound evidence for developing countries is still patchy but seems to confirm some of these predictions.

The only available accounts to date either rely mostly on newspaper reports (for example King Dejardin and Owens, 2009) or draw on small qualitative studies (for example Hossain *et al.*, 2009). In China, recent reports mention that 20 million migrant workers have already returned to their home villages and it is likely they will end up in marginal occupations in rural areas, but the gender dimension of these patterns is not fully highlighted. In India, a sample survey carried out by the Ministry of Labour and Employment shows that about a half a million workers have lost their jobs during October-December 2008 and most of them are contract workers. In Indonesia, the Philippines and Thailand, jobs have been declining mostly in manufacturing, including in factories that employ large shares of female workers (e.g. toy factories in Indonesia [King Dejardin and Owens, 2009]). In Bangladesh, however, there are yet no signs of declining orders in the ready-made garments export industry and, rather, the role of this country as a producer of cheap garments using cheap labour seems to be reinforced. More jobs are said to be available

for women, but they are found in the unlicensed sweatshops that sub-contract work, pay irregularly and treat workers unfairly (Hossain *et al.*, 2009). This signals a rise in vulnerable employment rather than in open unemployment in this country, especially among female workers.

Case studies reviewed in Hossain *et al.* (2009) show instances of poor people, particularly women, finding innovative ways of supplementing household income through informal low-margin activities, but at the cost of intensified time burdens and deteriorating health. Examples include rural Muslim women in Bangladesh reported to be working publicly in restaurant kitchens and on the new 100 Days Employment Guarantee Scheme. The gathering and sale of vegetables discarded by the wholesale vegetable market is another emerging activity. In Kenya, women explained that their work burden had increased dramatically, and that now they would have to leave home earlier and seek work washing clothes or selling charcoal, vegetables and food by the roadside. Other accounts point to an increase in activities of dubious legality. In many African countries most farmers described greater uncertainty and an inability to produce more in response to higher food prices (e.g. Kenya and Zambia). Reports of food intake declining in both quantity and quality and of women eating least and last were not uncommon in rural Kenya (Hossain *et al.*, 2009).

These findings underline the importance of social protection strategies designed to especially support poor rural women in their effort to provide for their families. They also underscore the need for a stronger policy commitment to investment in agriculture and specific attention to marginal and landless female farmers so that they are not excluded from the possible benefits arising from the supply response to the current crises.

2. Interpreting women's and men's differentiated patterns of work: key constraints and policy options

2.1. Changing patterns but persisting gender inequalities?

Part I documented that women and men occupy different positions and face different working conditions in rural labour markets across the developing world. Rural women and men experience work and employment differently also by age, ethnicity, social status and roles in their households. Patterns vary across countries and socio-economic settings and are changing in response to increased international trade, migration and other emerging trends. However, some of the broad structures identified by Ester Boserup in her seminal work on women's role in economic development in the 1970s seem to still be discernible in current regional configurations.

Boserup (1970) distinguished between a 'male farming system' and a 'female farming system'. The 'male farming system' was characterized by high incidence of landlessness, high levels of agricultural wage labour, inheritance through male lines and a low presence of women in the fields due to strict norms of female seclusion resulting in women concentrating mainly on tasks within the homestead. The 'female farming system' was characterized by family farming, low levels of wage labour, bilateral inheritance practices, communal ownership of land with usufruct rights for female members and high percentages of agricultural female family labourers. Women in this latter system played a major role in food production, had greater freedom of movement and were active in trade and commerce. Patterns similar to those of the 'male system' can still be found in the MENA region, in parts of South Asia (especially Pakistan, Afghanistan and Bangladesh)

and even in some regions of Latin America. Except for Latin America, women in these countries still participate in trading in limited ways. Some characteristics of the ‘female farming system’ can be observed in sub-Saharan Africa but also in many countries of Southeast Asia.¹²

Globalization is playing a role in transforming these gender patterns of rural work. Both female and male workers are now present in larger numbers in the traded, more market-oriented sectors of the rural economy, and rural women’s contributions seem to have gained greater visibility both in policy-making and research. But the extent to which different groups of workers are incorporated into the global economy and participate in the new processes varies. Even if it is difficult to tell because of limited statistics, women seem to be participating in the general movement out of agriculture – but at a slower pace than men. Migration and involvement in profitable non-farm activities appear more prevalent among rural male workers (as noted in section 5.2 of Part 1). Smallholders, which include many female farmers, have been facing hardship and greater vulnerability. Rural wage employment in large corporate farming is emerging as an important source of employment for rural women, especially in Latin America, but the evidence about working conditions and pay in these new sectors is mixed (as described in section 5.1. of Part 1). An unchanging aspect of the gender division of labour across regions is the division of domestic responsibilities: women are taking up a larger share of agricultural production and paid work but also continue to be the main providers of well-being to their family members. There are clearly many gender-related constraints still at work in rural labour markets. These pose some challenges to the achievement of decent work for women and men in the new global environment.

2.2. Identifying gender constraints and related policy responses

Part II of this paper identifies some key gender-related constraints in the rural economy and suggests, for each constraint, a number of possible policy responses. It is by no means a comprehensive review of all factors influencing gendered rural labour market outcomes; it simply focuses on what are considered the most relevant aspects. Various forms of gender disadvantage will obviously have different relevance and will intersect with each other differently, depending on the socio-economic characteristics of the countries concerned, their institutional settings and prevailing development strategies. The required policy mix in each context will consequently vary. The ILO Decent Work Framework, combining the four dimensions of employment, protection, rights and voice, informs the discussion of policy options.

Gender-related constraints can arise out of gender relations themselves (‘gender-specific constraints’) or may reflect the asymmetric distribution of resources between different groups, which limits men’s opportunities as well as women’s, but usually bears down more heavily on women (‘gender-intensified inequalities’). They can also be the effect of biases in policy: for instance, the state may contribute to female disadvantage by failing to legislate against discrimination or by the manner in which agricultural extension or land tenure reforms are designed and implemented (‘imposed forms of gender disadvantage’) (Kabeer, 2008). Gender-aware interventions are those that reflect in their design and implementation an informed understanding of the existing gender constraints in each specific socio-economic setting.

¹² This is only a broad-brush picture. The complexity and variety of livelihood arrangements, with different degrees of control over the production process by female and male members in specific contexts, must not be overlooked.

2.2.1. The burden of unpaid work

2.2.1.a. What and why is this unpaid work?

The division of domestic labour, giving women the main responsibility for household chores, care provision and other unpaid work to support their families and communities, is one of the major examples of a gender-specific constraint. Women effectively act as a safety net of last resort to ensure their family's well-being, even in the absence of adequate social provision by state and local institutions. This unpaid work has important economic functions that are rarely recognized and valued: it is key to food security and to maintaining adequate levels of productivity among the rural labour force.

As we have seen in Part I, a disproportionate share of the unpaid work burden falls on rural women's shoulders, thus restricting the time they have available for paid activities. The responsibility for children, in particular, may also constitute a reason for employers (unwilling to share the costs of care provision) to discriminate against married female workers in their hiring. Family responsibilities may also limit women's ability to participate actively in workers' cooperatives and other organizations and to mobilize for their rights.

There are many forms of unpaid work that rural women (more than rural men) engage in, and it is useful to distinguish them for policy purposes:

- (a) Women (and children) in the rural areas of most regions spend long hours collecting water and fuel (as shown by evidence provided in section 3.3. of Part I). There is scope for addressing this constraint through well-targeted interventions in physical infrastructure, which may be achieved through public investment and a variety of interventions, including, but not only, 'gender-aware' labour-intensive public works programmes (as suggested, for example, by Antonopoulos, 2007).
- (b) Women also spend much of their day caring for their children, assisting other family members who are ill or disabled, preparing food and cleaning. This would call for public financing of child care services, support for day care centres, health clinics, strengthening of community services for the elderly and other forms of social protection. Better physical infrastructure (e.g. rural electrification) and improved food preparation tools, as well as home- or community-based cottage industry food-processing technologies, could also help in reducing the drudgery of some tasks such as cooking and cleaning.
- (c) Women often work on the family farm or help in small business enterprises without receiving remuneration as a result of unequal power relations within households that severely limit their ability to make claims over their contributions. Policies to address this problem may include strengthening women's legal rights, supporting the formation of self-help groups (SHGs) and ensuring greater visibility through participation in the public life of the rural communities where women live.

There seems to be little variation in gender imbalances in domestic responsibilities across regions – in all countries from sub-Saharan Africa, to Latin America, to Asia, women carry out the bulk of unpaid work. But there are differences between women in different stages of the life cycle (e.g. women with infants and young children usually face the heaviest burden relative to both older women and younger unmarried women), between locations (e.g. female farmers living in remote areas have to spend longer hours collecting water or processing food than women living in areas better endowed with infrastructure)

and socio-economic status (e.g. better-off women can afford to pay for housework help and, if they are involved in paid work, they are also likely to be in forms of employment that provide child support).

Water and fuel collection

The burden of water and fuel collection is likely to reduce the amount of time women can spend in paid work and to increase the probability that they will be involved in more informal forms of employment. In South African poor rural households, for example, the time that women who must fetch water and fuel spend in paid employment is only 25 percent of the time that women who do not engage in water and fuel collection spend in it (Valodia and Devey, 2005).¹³ In Tanzania, time spent fetching water and fuel appears to be a significant constraint on women's participation in off-farm self-employment (World Bank, 2007b). A simple simulation exercise using the recently released Tanzanian time-use data suggests that investing in water-related infrastructure could free up many female working hours in a year. If the freed-up hours were converted into paid employment, this would be equivalent to a million new full-time jobs for women and an increase in income corresponding to about 6 percent of the total cash earnings for the entire population in a year (Fontana and Natali, 2008). During the dryer summer months, women participating in a microenterprise project run by the Self-Employed Women's Association (SEWA) in Gujarat, India must reduce the time they spend on paid activities because of the need to spend longer hours collecting water. Reducing water collection to one hour a day would enable these women to earn an additional US\$100 a year – a significant sum for a poor household (UNDP, 2006).

Child care

A generalization that can be made is that rural female workers with children are more likely to be self-employed (in agriculture or other sectors) or to work from home than single women. This type of work can be easily reconciled with reproductive responsibilities. Self-employment offers a more flexible work schedule (women in this category appear on average to spend fewer hours in paid work, as shown in Table I-12) and have lower barriers to entry compared with some formal wage sector employment where employers may discriminate against female workers with family responsibilities.

When women with children are very poor, though, they may lack even the most basic start-up assets and hence are forced to take up casual wage work under very disadvantageous terms. Examples of female workers with young children who engage as seasonal workers in the most insecure forms of employment, with no child care support or maternity leave, can be found in some NTAE sectors: for example, in South Africa (Barrientos and Kritzinger, 2002), where many female migrants live with their children in informal settlements close to the workplace; and in the Dominican Republic (Raynolds, 2002). In both cases, some of the children were still undernourished because their mothers' earnings were too low. In Punjab, Indian women working as wage labourers on contract farming in horticulture often bring their infants and children with them because they lack access to child care services (Gill, 2001).

¹³ The study cannot establish causality conclusively. It is possible that poor rural women in informal employment spend a significant amount of their time on water collection because, unable to access more regular employment, they have much more time at their disposal. An alternative explanation could be that these women may be unable to engage longer hours in more profitable income-generating work precisely because of their heavy unpaid work burden.

Both the age and the gender of children matter in terms of their mothers' ability to choose from alternative options of remunerated work. An interesting, if dated, study from Guatemala (Katz, 1995), for example, shows that older women are more able to engage in marketing activities that require them to be mobile and travel long distances than young women with infants. Independent agricultural activities are only undertaken by women with adult sons who can provide them with access to land.

Time constraints can be even harder to overcome for women heads of household. In Uganda, child care burdens coupled with poor infrastructure (lack of piped water and cooking stoves) significantly compromised the ability of women heads of household to expand and/or diversify production (Dolan and Sutherland, 2002). In the districts of Masindi and Mukono, when asked about the reasons for their lack of success in expanding agricultural production, men identified transport, marketing constraints and lack of credit, whereas women mentioned the time needed to look after their families, food preparation and the work on their husbands' gardens (World Bank, 2005).

Child care is also a problem for many of the women working in employment guarantee schemes, especially for mothers of infants. A recent social audit of the National Rural Employment Guarantee Act (NREGA) in Tamil Nadu, India (Narayanan, 2008) indicates that about 70 percent of the women interviewed had no child care facilities at the worksite despite the provision of the NREGA that 'in the event that there are at least five children under the age of six at the worksite, one of the female workers should be deputed to look after them and she should be paid the same wage as other NREGA workers'. About 50 percent of the women left their children at home and most of them were being dissuaded from bringing them to work. Women with children older than three years did not seem to face similar difficulties, and a large proportion of them reported sending their children to local child care centres (the '*anganwadis*') or to school. Further details about this case are reported in Box I-1.

The negative impact of child care on women's participation in public works – especially for women with children in the pre-school age group – was noted in other earlier studies such as Quisumbing and Yohannes (2004) for a Food for Work programme in Ethiopia, and Dejardin (1996) for a number of projects in other sub-Saharan African countries.

Caring obligations also often reduce the length of female wage workers' total years in employment, with negative consequences for their earnings and pension entitlements.

Young women with no children usually seem to have more chances than women with children to enter better paid jobs, in particular non-agricultural wage employment. Women with relatively grown-up daughters can rely on them for help with domestic chores if they take up paid employment. Evidence across countries and sectors suggests that a significant number of older children, especially girls, look after younger siblings while their mothers work (Smith *et al.*, 2004 for Kenya, Uganda and Zambia, and Katz, 1995 for Guatemala).

Unpaid family labour on farms

We have seen in Part I that the main (although not necessarily the only) occupation of a high proportion of rural women, especially in South Asia and North Africa, is that of 'unpaid agricultural family worker'. This is a very vulnerable category of work, the involvement in which often implies limited claims over what is produced and restricted access to more decent forms of employment. Evidence from West Africa reviewed in

BOX I-1**Employment guarantee, women's work and child care: Responses from 15 NREGA worksites in Tamil Nadu**

In Tamil Nadu, India, women constitute more than 80 percent of NREGA workers. A survey of crèche facilities and child care practices of working women conducted in the Viluppuram district in July 2007 indicates that child care is a significant problem for many workers, particularly so for mothers of children below the age of three years.

A total of 104 women with a least one child below the age of six years were interviewed. All of them were involved in earthwork (mainly carrying mud). The mother of the youngest child was already at the worksite despite having given birth just 17 days prior to the survey. Most of the women workers belonged to the scheduled castes and about half of them were illiterate. The main occupation of the majority was working on others' fields as agricultural labourers. As many as 41 percent declared that NREGA had been the only source of income for their household in the past few months. NREGA was perceived as giving these women a sense of independence and security. It also offered them the possibility of staying on in their village. Many women explained that without the NREGA they would migrate to Bangalore, Chennai or further-away places to work on construction sites.

Despite the beneficial role of the NREGA, these young mothers face some difficulties. Chief among them is the issue of child care. The NREGA states that in the event that there are at least five children under the age of six at the worksite, one of the female workers should be deputed to look after them and she should be paid the same wage as other NREGA workers. Yet only a few worksites seemed to have some arrangement for child care, with one or two elderly women taking care of the children brought to the worksite. Close to 65 percent of the respondents were unaware of this basic entitlement.

Almost 50 percent of the women left their children at home. When children were brought to the worksite, they were either left in the shade or kept near the spot where the mother was working. It seemed that women were being dissuaded from bringing their children to the NREGA worksite. Some were turned away from the worksite if their children accompanied them. A few women reported that whenever they brought their children to the worksite, their wages were cut. Of those who reported some form of harassment at the workplace, about 50 percent stated that such harassment was related to child care. The children who were left at home were either looked after by their siblings or left on their own. One child was tied to a table at home, with food left on a plate nearby.

Women with older children did not seem to face such difficulties. A large proportion of mothers of children over the age of three reported sending them either to the 'anganwadi' or to schools. Tamil Nadu has an impressive network of anganwadis but not all these facilities work well: their opening hours are different from those of NREGA worksites and often shorter, and they are at times located too far. About 85 percent of mothers who left their children at home said that if crèches were provided, they would certainly bring their children.

Source: Narayanan, S., 2008, 'Employment Guarantee, Women's Work and Childcare' *Economic and Political Weekly*, March.

Dey Abbas (1997) shows that women's obligation to work on their husbands' fields means they are often unable to undertake important operations on their own plots in time, with negative consequences for their own crops' productivity. Women contributing unpaid labour to their husbands' production of vegetable exports in Guatemala had to reduce their involvement in activities such as craft production, small livestock raising and storekeeping, all of which were sources of independent income for them (Dary, 1991 and Blumberg, 1994 quoted in Deere, 2005). Many other similar cases are known to exist but are not sufficiently documented in economic analyses of agricultural employment, except for specific case studies within the intra-household resource allocation literature (e.g. Quisumbing, 2003). Children, both girls and boys, also often work for no pay (or under very exploitative conditions) for their family or other plots (e.g. cotton fields in Egypt as documented in Human Rights Watch, 2001). This work exposes them to health hazards and can severely compromise their education and future employment prospects.

Effects on women's participation in training and extension services

A survey of women farmers in central Thailand found that women involved in rice production as a result of male migration lacked basic skills in pest and disease diagnosis, pesticides and application methods. Despite the negative consequences that this lack of knowledge had for their health, most of these female farmers were not willing to participate in training courses because of conflicting caring and housework commitments (Heong and Escalada, 1997). A USAID Integrated Agriculture Training Programme (IATP) in Papua New Guinea had only limited success because it failed to consider women's family responsibilities. The training courses were arranged away from the village for three full days and women found it particularly difficult to travel and arrange for alternative forms of child care (Cahn, 2008).

Emerging challenges

We have seen in Part I that the burden of unpaid care work has been increasing in rural sub-Saharan Africa because of the HIV/AIDS epidemic. For example, because of the need to nurse HIV-affected household members, women devoted less time to agricultural work and child care in Ethiopia and in Zambia (Bollinger *et al.*, 1999, and Waller, 1997) and had to switch to less labour-intensive crops in Uganda (Toupozis, 1994).

Increasing female migration is also likely to contribute to heavier housework burdens for the female household members remaining in rural areas, in particular if children are left behind. These other female members may be mothers, sisters, older daughters or grandmothers who may be negatively affected in terms of their own employment options or in their opportunities for education (see, for example, Luo n.d. for China; Paris, 1999 for Vietnam; IFAD and INSTRAW, 2007 for the Philippines). Young single women with fewer reproductive responsibilities are more likely to migrate further away from home in search of better job opportunities. This has been observed in Bangladesh, China, Malaysia and other Asian and Latin American countries.

Already weak essential public social services in most rural areas of developing countries are likely to worsen with the current economic crisis and thus increase the care-giving burden of rural women at the household level.

2.2.1.b. Policy responses

Physical infrastructure and home-based technology investment

Public investment in roads, rural electrification and improvements in water and sanitation infrastructure can significantly contribute to reducing rural women's unpaid work and generate many other benefits such as better health for women and their families. Cereal mills, other equipment for food processing, pressure cookers, refrigerators and other affordable and appropriate home-based technologies can also significantly help reduce the time and energy rural women must invest in food preparation and improve food availability and incomes from food sales off-season.

In Mali, an IFAD/UNIDO project supplied diesel-powered multifunctional platforms in 12 villages to help reduce the time spent in fuel collection. As a result, many women could shift their labour inputs to income-generating activities, leading to an average daily increase in their income of US\$0.50. Rice production and consumption also grew. One main reason for the success of this project is that women beneficiaries were involved from the beginning in its design, management and implementation (Grown and Gupta, 2005).

However, women do not always gain from improved energy services. In a mountainous village in rural China, following the introduction of electricity, some women moved part of their domestic activities to the evening and worked longer in the field during the day – the only substantial time-saving for them occurring in pig feeding. In the village there was a general increase in resting time, but this was much larger for men than for women (Network for Gender and Sustainable Energy, 2002; Institute of Development Studies, 2003). This points to the need to address the gender division of domestic labour with an integrated approach that combines improvements in physical infrastructure with awareness-generating programmes.

An example of a successful initiative in the area of water infrastructure is provided by SEWA's water campaign in Gujarat. The project was about improving access to safe and reliable drinking water and involved, among others, training women to repair hand pumps. Women's collective action was a crucial ingredient of the success. Women were initially reluctant to participate because water infrastructure was regarded as male territory and men were expressing hostility by refusing to drink water from a source built by women or to work on water structures that women managed. SEWA's district-level functionaries and village women leaders facilitated a process of mobilization through meetings, solidarity group formation and capacity building, and acted as interface between the local women and the water board. As a result, workloads from collecting water were reduced, enabling women to devote more time to remunerated employment or to rest. More reliable and safer water provision also led to a reduction of migration to nearby villages. From a general perspective, the project seems to have had a significant empowerment effect on women and on their willingness and ability to participate in the public domain, including involvement in *panchayat* (local council) meetings and formation of SHGs for savings (Mishra Panda, 2007).

Public works

More roads and better water and electricity infrastructure can also be provided through government-supported public works. Well-designed employment guarantee programmes can simultaneously fulfil the two objectives of generating jobs for both women and men, and creating assets that reduce aspects of women's domestic workloads, with important gender redistributive implications. This is more likely to happen if women and communities are directly involved in the design of public works. In Peru, for example, women's direct participation in the design of a rural roads project ensured that greater priority was given to their needs. Upgrades included roads that connected communities and also many non-motorized transport tracks that were used mostly by women and ignored by other road programmes. As a result, women started to participate to a greater extent in markets and fairs and spent less time obtaining food and fuel supplies; 43 percent of them reported earning higher incomes (World Bank, 2004a)

Public works that contribute to rural community welfare in a gender-equitable way do not have to be confined to physical infrastructure projects. As the Tamil Nadu NREGA case described in Box I-1 suggests, schemes that would allow women to look after children could be designed as a component of employment generation programmes. Care-providing public works programmes also could be an effective response to the upsurge in the need for care resulting from the HIV/AIDS pandemic, particularly in sub-Saharan Africa. A review of social fund projects in Thailand (ESCAP, 2003) highlighted several initiatives of this kind, including shelters for the elderly and HIV/AIDS patients, day-care centres and playgrounds.

Child care services

Child care support for working women in rural areas can promote the ability of mothers to participate in economic activities and indirectly support their children's well-being. The provision of child care is of most immediate relevance to wage workers but it can also support women in self-employment by possibly enhancing their chances for better paid non-agricultural waged work. The most common form of child care in rural areas is still through family members, including older siblings looking after younger ones. Other forms of child care are still rather poor and scattered. Child care can be provided through a variety of arrangements: government-funded day care centres, services by voluntary organizations or informal baby-sitting services. Publicly funded child care facilities relative to market-based child care services have the potential to reach a wider range of workers, including the most disadvantaged.

Some innovative projects appear to be available to meet the demand for child care in rural contexts, particularly in India. Mobile Crèches is a voluntary organization that offers child care to women working in the construction sector. It has more than 300 centres and reaches about 200 000 children across India. It approaches builders in urban and rural construction sites, with a view to opening a centre there. Those who agree provide basic facilities (Kabeer, 2008). SEWA also provides child care and targets groups of migrant workers. For instance, it supports women in a district of West Gujarat where many of the poorest families work in salt extraction. The salt workers have to stay in the proximity of their workplace, near the coastal desert terrains, up to eight months in a year. The children have to follow their parents, with often negative implications for their education and overall development (SEWA, 2000).

It is also important to encourage men to take on family responsibilities. An interesting project trying to achieve this objective is promoted by the Sonke Gender Justice Network in South Africa, which uses innovative methods to support men's involvement in the care of children, particularly in rural areas affected by HIV/AIDS. Sonke combines advocacy (for example, a national campaign on 'Brothers for Mothers') with participatory workshops in specific villages aimed at generating awareness on a variety of issues including health, sexuality, gender and violence (<http://www.genderjustice.org.za>).

Health insurance

Coverage of public social security schemes, including health insurance, tends to be limited in rural areas (ILO, 2008). Even where, as in many Latin American and Caribbean countries, contributory social security systems are gradually being extended to agricultural wage workers (ILO, 2003), most seasonal and migrant workers remain excluded. Lack of health insurance may aggravate the load of unpaid care at moments when families are especially vulnerable.

Health insurance schemes for informal workers implemented by civil society organizations can offer effective alternatives when public social security schemes are lacking. SEWA in India, for example, supports an innovative scheme providing about 100 000 women workers, in both urban and rural areas, with health insurance, including a maternity component and life and asset insurance (UNRISD, 2005; Chatterjee and Vyas, 2000 quoted in Chen *et al.*, 2004; ILO, 2003). However, some of SEWA's poorest members cannot afford the premiums, which have to be set at a rate that ensures financial viability (UNRISD, 2005).

Social pensions

Social pensions can partly contribute to redressing gender inequalities in employment resulting from care responsibilities, as they can offer women some financial support in their old age. As the cases of Brazil, Namibia and South Africa show, social pensions, especially if paid directly to women, have a significant positive impact on poor households (Barrientos *et al.*, 2003; Kabeer, 2008; Duflo, 2003; UNRISD, 2005; Devereux, 2001; Schatz and Ogunmefun, 2007). In South Africa, they constitute an important source of income for households affected by HIV/AIDS (Schatz and Ogunmefun 2007; Ferreira *et al.*, 2002 quoted in Kabeer, 2008).

Gender constraints and related policies: key issues related to unpaid work

Constraint	The burden of unpaid work is one of the major examples of a gender-specific constraint. Its contribution to maintaining a healthy and productive rural labour force is not sufficiently recognized and valued.
Employment aspects	Unpaid work limits rural women's participation in self-employment and wage employment, and in agricultural and non-agricultural work. It negatively affects access to self-employment opportunities in the sense of preventing women from diversifying into more profitable opportunities that involve working longer and more regular hours and/or travelling longer distances. It negatively affects wage-employment mostly by weakening women's bargaining power relative to their employers. It affects female workers' productivity more in general by increasing stress and fatigue. Women's taking up paid employment (in whatever form) may have negative intergenerational effects if the burden of unpaid work is transferred to daughters.
Geography	There seems to be no variation across regions or economic structures in the intensity of this burden. Where physical infrastructure is poor and public provision of social services weak, the problem is especially limiting.
Policy recommendations	Recommendations are for a policy mix that combines: (1) public works involving women from the design stage and fulfilling simultaneously the two objectives of generating employment (for both women and men), and creating infrastructure and food-processing technology that reduce aspects of women's domestic workloads; (2) social protection offering good-quality care provision and health services, hence encouraging a more equal sharing of responsibilities between public and private institutions; and (3) support to grassroots organizations in creating awareness around rights and entitlements, including strengthening the participation and voice of women's groups and encouraging men's greater involvement in care responsibilities.

2.2.2. Education

2.2.2.a. Gender and education: What is the situation?

Human capital gains through education can be a crucial factor in strengthening rural women's position in the labour process (sometimes labour is the main factor of production over which women have some control); can help diversify rural family incomes through non-farm earnings; may improve the stability and quality of non-farm employment by allowing access to vocational training; increase women's access to labour markets beyond their locality (such as through migration); and increase women's ability, through resources and information, to claim their rights. A crucial interrupter of female education is marriage and/or child-bearing. In turn, these can limit women's labour market access due to discriminatory practices, and therefore reduce incentives to invest in female education. Gender biases in both the demand and supply sides of education need to be addressed.

Education is likely to be positively associated with participation in high-productivity rural employment. This is, for example, suggested by a regression analysis including sub-Saharan African countries (Ghana, Malawi and Nigeria), Asian countries (Bangladesh, Indonesia, Nepal, Tajikistan and Vietnam) and Latin American countries (Ecuador, Guatemala, Nicaragua and Panama) (Winters *et al.*, 2008). The estimated effects are stronger as national incomes rise, and women appear to gain more than men from each additional year of education. A similar result is found by Abdulai and Delgado (1999) for Northern Ghana: years of schooling increase the likelihood of participation in non-farm work and of earning higher wages, more so for rural women than for rural men.

Education appears to increase women's chances to enter the formal rural labour market, particularly the wage sector, in three rural states of Mexico (Pagan and Sanchez, 2001). Unfortunately, the study does not separate agricultural from non-agricultural activities. Education is found to have a positive effect particularly on the labour market participation of married women, who generally face more barriers to employment than single women. Secondary and post-secondary education increases the chance that they are in the salaried sector relative to self-employment. Another study (Katz, 2001) on Mexican *ejidos* (agrarian reform farms) examines gender and generational differences in off-farm wage labour market participation. Men are much more likely to hold off-farm jobs than women, but mainly in unskilled positions. The few women who access off-farm employment are more likely to be in skilled or semi-skilled jobs. However, since the majority of the women in the study were single, it is unclear whether they would continue to work after marriage.

Most of the women who earned relatively high wages in stable employment on large state-run farms (including citrus plantations, coffee plantations and irrigated tomato and vegetable projects) in Mpumalanga, South Africa had completed more years of schooling than other female wage labourers interviewed, avoided early and frequent pregnancies and had more work experience (which boosted wage rates). An intergenerational effect was also found: women whose mothers attended school had completed more years of school (about nine years) than the women whose mothers had not attended school. Conversely, children whose mothers worked as child labourers (and were unable to attend school regularly) were more likely to be child labourers themselves. The majority of the workers with stable jobs were South African. By contrast, migrant female workers from Mozambique were unable to access remunerative employment on state-run farms and had uncertain legal status within South Africa (Sender, 2002).

Education can help rural women, particularly the young and single ones, to access urban wage employment. The positive effect of education on rural-urban migration propensities appears to be stronger for men than for women in some countries, for example in Ecuador (Katz, 2000), but the evidence is mixed. Still, Katz (2003) finds that in Mexico, higher levels of education are found to enhance rural women's chances of migrating to the United States but to reduce men's chances. Evidence from China suggests that the probability that women with higher levels of education will find a job by migrating to the cities has risen over time (De Brauw *et al.*, 2004).

The impact of education on women's rural labour market participation may depend on the specific sociocultural context. For example, in southern India, where increasing the opportunity of a good marriage is often the main reason for supporting girls' education, education can lead to a decline in female wage employment and reinforce women's traditional roles, as found in a village in Maharashtra (Kabeer, 2003).

Barriers to women's non-farm employment reduce the returns to women's education and dampen parental incentives to invest in girls' education. For example, the higher probability of women obtaining non-farm employment has gone hand in hand with higher educational attainment of girls in the Philippines. In contrast, Ghanaian women have more limited access to non-farm labour markets, which in turn likely discourages parents from investing in their daughters' schooling (Quisumbing *et al.*, 2003).

Returns to education are greater in non-farm employment. While education has a positive relation to farm yields, education is less relevant for agricultural family work and self-employment. However, it does have a direct effect on rural household well-being. In Africa, children of mothers who spent five years in primary education are 40 percent more likely to live beyond the age of five years.

An important issue relates to whether some kind of minimum level of achieved education is required to acquire training. A study shows that entry into technical education requires a minimum of eight or ten years of schooling in Bangladesh (Mitra and Rahman, 2002 quoted in Jackson and Rao, 2004). Very few women thus became eligible for such technical training, which could improve access to better jobs. Training may actually reinforce occupational segregation based on gender. In both formal and non-formal education, boys and girls are often channelled into different subjects. This means girls are often 'directed' into subjects that are essentially extensions of women's household and reproductive tasks, such as sewing, food processing and nutrition (ILO, 2000).

In terms of accessing agricultural technology, Quisumbing (2003) shows that education substantially improves yields, but high levels of schooling might not be the most important factor. Well-designed extension services that can be easily understood may be more, or equally, effective for women. In Kenya, women who had less education than men excelled in the uptake of soil fertility replenishment technologies as long as explanations were given in simple terms (Quisumbing and Pandolfelli, 2008). The study suggests that women in the programme understood the technologies better than men but does not provide any detail of why this was the case. In Bangladesh, a local non-governmental organization (NGO) successfully taught illiterate women how to manage fishponds by giving them notebooks with illustrated instructions (*ibid.*).

Relevant and quality extension services and training are limited for women farmers (World Bank, IFAD and FAO, 2009). In Vietnam, for example, women made up only 25 percent and 10 percent of participants in training programmes on animal husbandry and on crop cultivation, respectively (Kabeer, 2008). In Cambodia, women were only 10 percent of extension beneficiaries (Asian Development Bank, n.d.). In Senegal, according to the 1998/1999 census, male plot managers received three times more agricultural extension services than female plot managers (FAO, 2005a). Reasons include that research and extension services tend to focus on the tasks that males specialize in; access to extension services often requires travelling long distances to district centres, taking several hours away from the family; and extension services are staffed overwhelmingly by men, raising cultural difficulties in engaging in face-to-face communication with women farmers.

Are education and land correlated? Deere and León (2003), in their review of ethnographic material on gender and land inheritance in 12 Latin American countries, argue that a woman's age, education and status within her household (whether she is head of her family or not) are all positively related to greater gender equality in land inheritance. However, in contexts where land is accessed only through marriage, the education factor may play a marginal role.

A recent study (Hare *et al.*, 2007) finds no evidence of any statistical correlation between a woman's educational background and the probability of obtaining land in rural China.

2.2.2.b. Policy responses

Policies for promoting greater gender equality in education with a view to improve access to decent rural jobs must combine measures that address both the content of education and more practical problems that girls face more often than boys in accessing schools and training services. The emphasis of education policies should evidently vary depending on whether the labour market of the area concerned is dominated by agricultural activities or non-agricultural activities.

Measures could include: better design of curricula so as to be more relevant to the technical knowledge required in agriculture; encouraging girls (for example through scholarships) to include technical subjects in their study plans and boys to join 'home economics' classes; more and better designed vocational training for women; gender training for teachers, including on issues related to sexual harassment; incentives for male and especially female teachers to work and remain in rural schools; building new schools and improving physical access to them, paying particular attention to suitable locations and means of transportation which are safe and women-friendly; and adapting school times to patterns of rural life (including the need of some children to participate in aspects of rural work in particular moments of the day, or seasonally).

PROGRESA (Programa de Educación, Salud y Alimentación) is a much-cited example of a cash transfer programme implemented in rural Mexico to assist poor families in meeting the financial and opportunity costs of their children's school attendance (see, for example, Skoufias, 2005). This programme transfers cash directly to the children's mothers and provides higher stipends for girls than for boys. The assessment of whether PROGRESA has been successful in achieving its goals is mixed. While evidence points to an increase in enrolment rates, both in primary and in secondary education, especially for girls, there is concern that the programme may have reinforced existing gender inequalities within households by intensifying mothers' caring responsibilities. Mothers must spend more time taking children for regular health checks, attending workshops on health and programme co-ordinators' meetings and contributing to community work through cleaning buildings or clearing rubbish as a requirement for obtaining the cash transfer. In sum, this programme seems in practice to target women because they are an effective way of reaching children, but it does not contribute to increase their own agency and power (Molyneux, 2006).

FAO, in collaboration with the World Food Programme and other partners, has supported the creation of Junior Farmer Field and Life Schools (JFFLS) for orphaned youth and children in countries where the prevalence of HIV is highest: Cameroon, Kenya, Malawi, Mozambique, Namibia, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe (World Bank, IFAD and FAO, 2009). The particularly valuable feature of this project is that it combines support to very vulnerable children, using innovative and holistic teaching methods.

The JFFLS training programmes target both boys and girls and help them to develop agricultural knowledge and livelihood skills they will need to sustain themselves and their families in the future. The programmes so far appear to have been successful (as described in Box I-2), but further support with access to productive assets such as land or credit is crucial to ensure that the knowledge acquired through JFFLSs will enable

BOX I-2**Junior Farmer Field and Life Schools: empowering orphans and vulnerable youth living in a world with HIV/AIDS**

Children in JFFLS programmes learn practical agricultural skills by undertaking agricultural tasks in an allocated plot. They learn about local agro-ecological conditions, field preparation, sowing and transplanting, weeding, irrigation, integrated pest management, utilization and conservation of available resources, utilization and processing of food crops, harvesting, storage and marketing skills. There is also emphasis on 'life skills' because many of the children attending the JFFLS no longer have parents to support their socialization. The JFFLSs promotes awareness on HIV and AIDS prevention, gender equality, children's rights, nutrition and good hygiene. Efforts are made to identify the specific different needs of girls and boys. Teaching methods include participatory educational theatre. Boys and girls have equal access to learning, and school resources are distributed fairly among them. Equal distribution of school meals to boys and girls provides an alternative to local feeding practices in many communities which tend to give priority to boys.

Preliminary assessments indicate that most JFFLS programmes have managed to build women's and girls' confidence by offering new role models for girls through innovative educational methods, improved participant skills and their status and visibility within their communities.

Source: World Bank, IFAD and FAO, 2009

students to benefit from decent jobs once they complete their training programmes. More in general, integrated programmes that link skills training to creating new income-generating activities have great potential.

Emergencies and 'double discrimination'

Mobile school programmes in rural areas have the potential to benefit the most vulnerable girls within groups that have been displaced by armed conflict, or are forced by other disasters to lead a nomadic life. A successful example is provided by the Hanuniye project run by the Nomadic Health Care Programme in Wajir, Kenya. Its implementation strategy follows the so-called 'dugsi approach', which involves a mobile teacher living with the family or herding group. The attraction of this model is that it is compatible with daily mobility needs – with lessons designed to fit around household labour arrangements – as well as long-distance mobility.

The Hanuniye project reportedly enrolled 3 148 boys and 2 830 girls as pupils between 1995 and 1999 (Atchoarena and Gasperini, 2003). Assuming these figures are accurate, this is a remarkably high number, representing approximately 50 percent of the total district primary enrolment. What is even more notable is that the project appears to have successfully managed to reach both girls and boys equally. Administrative difficulties, combined with shortcomings in the design and maintenance of collapsible classrooms and the reluctance of some teachers to adapt to a nomadic lifestyle, have undermined the planned use of mobile schools in other cases, such as in Nigeria (Atchoarena and Gasperini, 2003). Mobile schools should be seen only as a temporary solution.

Female children with disabilities tend to face double discrimination based on their gender and their disability. Sensitizing and training school teachers and programme administrators to recognize and deal with disabilities is essential. Special learning materials are also needed in some cases.

Other forms of double discrimination may involve young unwed pregnant girls. Early pregnancies often result in the discontinuation of a girl's education in many rural areas (Atchoarena and Gasperini, 2003). When a young unmarried girl becomes pregnant,

especially in rural communities, she is immediately seen as an outcast whose prospects in life will be reduced. To address such a challenge, the Morocco Second Chance School Programme offers out-of-school girls a second chance at receiving an education, as described in Box I-3.

Weak enforcement of legislation is also another important problem that needs to be addressed to facilitate girls' access to education. Countries which are party to international human rights covenants have automatically signed and agreed to eliminate any form of discrimination on the basis of sex. However, these rights have not been extended to issues such as marriage, access to education and other aspects of family life in some rural communities where cultural norms are strongly gender-biased. Under sections 21 and 23 of the UN Convention on the Rights of the Child (CRC), it is illegal for a parent to marry off his or her daughter if she is under 18 years. However, early marriages are still common in many rural communities, where people may be unaware of laws and where extreme poverty sometimes leads families to treat marrying girls at an early age as a form of insurance. Early marriages often mean the end of the educational experience for the girls involved.

School facilities

Long distances between school and home seem to be a common problem for access to education in many countries. Lack of good and safe roads appears to be a significant problem especially for girls. Girls fear being attacked and sexually harassed, and parents are equally concerned (Atchoarena and Gasperini, 2003). To remove such barriers, schools need to be placed in adequate locations, where access will not be threatening for girls. Inadequacy of school infrastructure also contributes to low enrolment of girls. Appropriate facilities, such as clean and separate latrines for girls and protected buildings and playgrounds, are an important factor in creating a friendlier learning environment (Atchoarena and Gasperini, 2003). Duflo (2001) provides an example of how construction of school buildings in sparsely populated regions of Indonesia significantly increased enrolment and attendance for primary education. The school building programme was implemented by the Indonesian government in collaboration with the World Bank

BOX I-3

The Second Chance Schools in Morocco

The Second Chance School Programme is implemented by the Ministry of Education in partnership with various government departments, NGOs and local authorities and associations. Several international partners support the programme as well. The NGOs engage young graduates as facilitators, enrol the pupils, make local arrangements for the classes, seek additional resources and generally manage the programme at the local level. Teachers and facilitators are recruited within each region. They are given training by specialized trainers. Classes take place in various facilities: rooms offered by local associations, government offices, unoccupied school classrooms and even private homes. To mobilize the various material and human resources needed for the programme, information and sensitization campaigns are carried out.

The programme has been a success in most rural areas because of its flexibility and adaptability. The weekly teaching sessions, for example, vary from 4 to 24 hours over six days, and the periods of holiday vary too, depending on the needs and the availability of each learner.

In the four years through 2000, more than 87 000 children (of whom more than 65 percent are girls) participated. Of the 48 000 'graduates', over 3 000 passed into the formal schooling system and some 45 000 were prepared for employment. Nearly 7 000 of them had apprenticeships in agriculture, crafts, services, industry and commerce. During the same period, 1 382 teachers/facilitators were trained (over half of them women).

Source: Atchoarena and Gasperini (2003)

and it is reported to be one of the fastest primary school construction programmes ever undertaken. It was designed explicitly to target children who had not previously been enrolled in schools. The number of schools to be constructed in each district was proportional to the number of children of primary school age not enrolled in school. The programme had the greatest impact in the poorest rural regions.

Gender constraints and related policies: key issues related to education

Constraint	Lack of education can be regarded as a gender-intensified constraint which can be further exacerbated by badly designed policies.
Employment aspects	<p>Higher levels of education can help diversify into non-farm employment and may improve its stability and quality.</p> <p>Secondary and post-secondary education are more relevant for access to formal wage work than to self-employment.</p> <p>Education increases women's access to labour markets beyond their locality (migration); and enhances women's resources and information to claim their rights.</p> <p>Education is less relevant for agricultural self-employment. Well-designed extension services and training are more important than education for improving productivity in agricultural work, but women's access to such services is often limited.</p> <p>Education may be less relevant as a factor influencing labour market participation than marriage/stage in life cycle/having young children.</p>
Geography	Gender gaps in educational attainment seem larger in sub-Saharan Africa than in other regions. Reducing the gender gap in primary education is a priority for improving female access to decent work in agriculture-based countries. Improvements in secondary and tertiary education are more relevant in transforming urbanized countries with large rural non-farm sectors.
Policy recommendations	Recommendations include a policy mix that combines: (1) better design of curricula so as to be more relevant to the technical knowledge required in agriculture; (2) encouraging girls to include technical subjects in their study plans and boys to join 'home economics' classes; (3) more and better designed vocational training for women; (4) gender training for teachers; (5) building new schools in ways that facilitate girls' physical access to them.

2.2.3. Land and credit

2.2.3.a. What is the situation?

Land is the prime productive asset in most rural areas of developing countries. Owning land, using land owned by others and securing waged farm work often depend on complex social and legal frameworks, many with gender dimensions. These institutional issues are key linkages to poverty and incomes because of how they govern the allocation of labour and the distribution of the products from land. The specifics vary from place to place, but globally there is a marked bias against women's control of land as a productive resource.

A key characteristic is that women seldom own the land that they cultivate. While this is perhaps widely recognized, what is noteworthy is how substantial the gender gap is. In all countries for which data are available, women are less likely to own land, and own less amounts of land when they do own it (World Bank, 2007a). In Congo and Tanzania, for example, the female share of landowners was 25 percent (Deere and Doss, 2006), and in Benin, where 11 percent of landowners are female, the average size of women's holdings is about 1 hectare, compared with 2 hectares for men's holdings. In Pakistan, women own less than 3 percent of plots, even though 67 percent of surveyed villages reported a woman's right to inherit land (World Bank, 2007a). In India, according to the 2000/2001 Agricultural Census (which provides information only on operational holdings and not on land ownership), only

12 percent of holdings covering 9 percent of the total area are operated by women (Srivastava and Srivastava, 2009). Even in Indian states that appear to have some progressive gender indicators, when it comes to land, female shares remain low: in Kerala, women operated only 21 percent of the holdings. In Latin America, the female share of landowners ranged from 11 percent in Brazil to 27 percent in Paraguay (Deere and Doss, 2006).

Women's control over land reflects deep-rooted land tenure norms and laws. These vary considerably and are difficult to generalize. Sub-Saharan Africa has the most diverse arrangements.

A major reason why generalization is difficult – and previewing the policy discussion – is the gap between social/legal norms and actual practice, which varies from place to place. An example is Muslim Africa, viz. the coastal eastern region, Northern Nigeria, Northern Sudan, Chad and the area from the Sahelian countries to Senegal. Islamic law entitles a daughter to inherit land amounting to half of what sons inherit (due to the view that a woman is provided for, whereas a man must provide). Also in some areas a woman can inherit one-eighth of her husband's land. While Muslim norms have been favourable relative to those in other parts of Africa such as the cocoa-producing regions of West Africa, many Islamic communities force women to surrender or sell inherited land to male relatives.

Under house-property systems, women have greater control of land or livestock, but formal ownership is often not given. Thus women's claims depend substantially on their status as daughters and wives, and may be weakened by claims by male relatives (see, for example, the study of Uganda by Dolan, 2002). Divorced women and widows are particularly vulnerable, especially in areas with high prevalence of HIV/AIDS (Strickland, 2004 for Kenya, Lesotho, Malawi, South Africa and Tanzania; FAO, 2003 for Namibia; FAO, 2009 for Mozambique; and FAO, 2004 for Zambia).

Inheritance norms constitute the main access to land. In South Asia this has been traditionally patrilineal (Agarwal, 2003; Allendorf, 2007). The significant exception is Sri Lanka, where both sons and daughters can inherit, widows can inherit all of the deceased husband's property in the absence of descendants, and married women have the right to acquire and dispose of their individually owned property (Grown and Gupta, 2005).

Across Southeast Asia in Cambodia, Indonesia, Laos and Vietnam, under both customary and formal law, men and women have equal rights to land (World Bank, 2005). Parents usually decide which children will inherit what property. Traditionally, the youngest daughter remains home to care for elderly parents, even after marriage, and thereby inherits the family homestead. In China, too, women and men have equal rights to land, but in practice it is more difficult for rural women to exercise these rights than it is for rural men or urban women. Women in the countryside often lose their access to the family's land after marriage because they move to their husband's village. But if they divorce, or their husbands die, it is impossible for them to claim their share of land in their husbands' villages. As a result, rural women are becoming landless, especially upon divorce (Du and Knaji, 2002).

Even in Latin America, with perhaps the most favourable legal framework, inheritance has been historically skewed towards men, in part because agriculture is defined as a male activity and in part because legal headship status confers male privilege in marriage (Deere and Leon, 2003).

Lack of land significantly limits women's access to credit, water and grazing rights, and thereby constrains options for self-employment in agriculture and social protection in times of shocks. In Kenya and Senegal, for example, women are excluded from contract farming in high-value products because they lack statutory rights over land, have limited access to irrigation and infrastructure and have weaker claims over family labour (Dolan, 2001; Maertens and Swinnen, 2009). In India, the absence of land titles significantly limits women farmers' access to institutional credit (Srivastava and Srivastava, 2009).

The lack of secure tenure limits women's land use and cropping choices. In Guatemala, women's independent – but not joint – ownership of land was found to be a significant predictor of women's participation in non-traditional agro-export production (Hamilton and Fischer, 2003). Joint ownership appeared to have a less clear benefit. In Guatemala, Katz (1995) found that land ownership affected the degree of women's control over the benefits from agro-export production.

A man's control over family land strengthens his ability to command more of his wife's labour time in order to maximize his income. In Zambia, for example, men were able to increase maize production by demanding greater labour inputs from their wives, whereas women producers were not able to exert similar claims over their husbands' labour (Wold, 1997).

Women's access to land can be a critical element in diversified livelihood systems. This can be due to greater own-produce, credit and non-farm earnings (Katz and Chamorro, 2003; Deere *et al.*, 2004; Aspaas, 1998). In Peru, female land rights are positively associated with off-farm income. Most interesting is that female land rights are positively and significantly associated with higher off-farm income only in dual-headed households (where both adults are present) (Deere *et al.*, 2004).

It is important to note that land is not always the most binding constraint. Whitehead (2008) argues that while land is a constraint to women's farming in some places (for example Uganda), in other parts of sub-Saharan Africa there are other constraints that play a larger role, such as inadequate access to labour and other inputs. According to Ann Whitehead, the land constraint may be felt more heavily in places where agriculture is a more important source of livelihoods, where the gender bias in land ownership is more serious and where land scarcity is a severe problem. In India, where growing land scarcity has intensified male competition and created additional constraints to women's usufruct, trusteeship and ownership rights, women's access to land seems to have become more constrained (Jackson and Rao, 2004). In India, the land question is also crucial because, as a result of male out-migration, women remain largely confined to agriculture and they are faced with the prime responsibility for farming, but without rights to the land they cultivate (Agarwal, 2003).

Even where land constraints are binding, it should be noted that this affects mainly farm-related employment and earnings, with education as the more important determining factor in non-farm employment (as discussed in section 2.2).

While women's access to land is becoming more constrained in India, the reverse seems to be happening with regard to access to credit. The provision of microcredit in South Asia (as well as in Africa and Latin America, although perhaps with a more limited coverage in these latter regions) is often celebrated as a great achievement for women's empowerment. Credit and other financial services are basic requisites for increasing agricultural production and developing profitable enterprises, but many women small

producers remain excluded from formal sources because of lack of collateral and financial skills and institutional and cultural biases against them.

Microcredit has indeed provided some options for rural women's self employment, but cannot be regarded as producing successful female entrepreneurs broadly. Women in some rural areas may now have good credit access, but usually to small amounts; it is mostly men who continue to benefit from larger loans and formal financial services. Because of the small size of their loans and the many other economic barriers they face, rural women are often trapped in low-value activities. In Sri Lanka, for example, Quisumbing and Pandolfelli (2008) report that average returns to capital are zero among female-owned enterprises but greater than 9 percent a month for male-owned enterprises. A study of a credit programme in Egypt in which equal numbers of male and female clients were interviewed finds women to be involved in only 28 of 96 different enterprises reported by clients (Sebstadt and Cohen, 2000). This evidence stresses the importance of complementing microcredit with initiatives that promote rural women's access to higher-value sectors and non-traditional businesses as well as of developing more inclusive formal financial services.

2.2.3.b. Policy responses

Policy options to redress gender disparities in land rights may include: legal reforms and measures to ensure their implementation; joint titling programmes; and collective approaches. Policy initiatives for gender-equitable finance need to integrate credit provision with a range of other measures to protect women's rights over their own financial assets and to promote women's participation in higher-return economic activities. Measures cannot be limited to microcredit, however, but must involve the development of more inclusive and less gender-biased formal and informal financial systems.

Land legislation

Across sub-Saharan Africa (e.g. Eritrea, Kenya, South Africa, Tanzania, Uganda and Zimbabwe), Asia (e.g. India, Kyrgyzstan and Tajikistan) and Latin America (e.g. Brazil, Colombia, Honduras and Nicaragua), governments have enacted legislation to guarantee women's property and inheritance rights (see Grown and Gupta, 2005; FAO, 2006; UNIFEM, 2005; Deere and Doss, 2006). Tanzania's 1999 Land Law, for example, provides co-ownership of land to both spouses and prohibits village councils from discriminating against women (Jacobs, 2002). Uganda's 1998 Land Action and Condominium Law recognizes women's equal right to buy and own land and housing (Grown and Gupta, 2005). Tajikistan's 2004 amendments to the Land Reform Act strengthen women's legal entitlements (UNIFEM, 2005).

Unfortunately women and men's equal access to land continues to not be realized in practice.¹⁴ Statutory laws sometimes conflict with customary laws. In Namibia, for example, the Married Person Equality Act of 1996 states that, upon the death of a spouse, both men and women are entitled to assets accumulated through marriage. However, women continue to face persistent discrimination arising from customary laws, as indicated by the numerous cases of property grabbing by family members of the husbands who had died from AIDS-related causes (FAO 2003). In South Africa, the implementation of the land reform programme has been rather weak because of a range of factors including: lack of clear

¹⁴ For further discussion of these issues in Uganda and Eritrea see Grown and Gupta, 2005; for Tanzania, see Jacobs, 2002; for Namibia, FAO, 2003; for Brazil, Deere and Doss, 2006.

lines of accountability of either policy-makers in the national government or implementers at the provincial level with regard to the enforcement of the Land Reform Gender Policy Document issued in 1997; limited authority of the Gender Unit within the Ministry and Department of Land Affairs; a rather inflexible programme design; and limited involvement of grassroots movements, which tend to be more vocal in urban areas (Walker, 2002).

Joint titling

Joint titling is another option for redressing gender imbalances in access to land. In the early 1990s, five Latin American countries (Brazil, Colombia, Costa Rica, Honduras and Nicaragua) passed agrarian legislation for joint adjudication or titling of land to couples. Similar initiatives have been taken in Cambodia, India, Indonesia and Vietnam (Lastarria-Cornhiel, 2003). Joint titling can help to guard against capricious actions by one spouse and protects against the dispossession of women through abandonment, separation or divorce (Grown and Gupta, 2005).

Joint titling initiatives have produced mixed results. In Nicaragua, the number of women landowners has increased as a result of joint titling programmes. Law 209, which came into effect in 1995, stated that men and women had the equal right to receive land titles and established the option for couples to apply for joint title to land. The principle of joint titling was strengthened in 1997 by making it compulsory for families receiving titles for land distributed under state agrarian reforms to be issued in the names of both spouses (Law 278, Article 49). As a result of this legislation and the dissemination campaign and training initiatives accompanying it, the number of women with legal rights to land dramatically increased. This success is also due to the active lobbying of well-organized rural women (FAO, 2005a).

Similar achievements are reported for Colombia, but not for other Latin American countries. In Honduras, for example, deeply rooted sociocultural norms and the weakness of rural women's organizations appear to have been the main factors limiting the success of the joint titling reform (Lastarria-Cornhiel, 2003).

In Cambodia, a survey of 20 000 land titles issued since 2001, following new laws for joint titling, found that 78 percent were in the names of both women and men (World Bank 2004b). However, women's rights to land may be denied in practice because of cultural and social factors. In principle, when land is jointly registered, both parties must sign to transfer land titles; in practice, however, this is not enforced, and women are vulnerable to losing their portion of control over such decisions and deferring to their husbands. Men often sell land without consent from their wives, and, as a result, women may also lose access to the proceeds of the sale. Women's low literacy is an important factor limiting their access to information about land issues, sales and rights (Asian Development Bank, n.d.).

Collective approaches to land ownership

An effective policy intervention could include what Agarwal (2003) calls a "collective approach". This would involve providing groups of landless women with credit for leasing or purchasing land, and encouraging them to cultivate it jointly. While collective ownership and management can raise its own challenges, groups can help resolve many of the difficulties women face as individuals. Being part of a group helps in mobilizing funds for capital investment and exploiting economies of scale, and leads to labour sharing and cooperation in product marketing. This is a very innovative approach, examples of which can be found only on a small scale, for example in South Asia (see Box I-4). The extent to which these types of programmes have been implemented elsewhere, and could be extended successfully to other contexts, deserves further analysis.

BOX I-4**The Deccan Development Society (DDS) in Andhra Pradesh**

The main objective of DDS is to ensure food security in an environmentally friendly fashion, through organic farming, multiple cropping and wasteland development, to be achieved through collective farming. DDS helps poor, low-caste women, and particularly single women, to organize into groups to lease, purchase and cultivate land together.

Leasing land

The land-leasing programme was introduced in 1989 and currently includes 629 women cultivating 623 acres across 52 villages. Initially, women leased on a sharecropping basis but are now moving to cash rents. Some 25 percent of the rent is paid by members themselves and the rest through interest-free loans from DDS. Very poor women can substitute their labour for cash. Today, most lease groups consist of 5-15 women, but in the past many had 30-40 and one even had 60 women leasing 40 acres. After paying the rent and other costs, as well as DDS's loan and keeping aside grain for seeds, the remaining harvest is shared equally among the lease group members.

DDS also successfully lobbied the state government to allow women's groups to use the money available through the Government's poverty alleviation scheme – Development of Women and Children in Rural Areas – for leasing land, rather than for conventional uses such as tailoring, milk cattle and handicrafts.

Women's committees examine the lease proposals put forward by the women's groups, assess the land's quality, keep records of each woman's work input and ensure equitable distribution of wages and produce. In 1995, each woman participant received enough cereal and pulses to feed her whole family for a month, in addition to harvest wages.

Leasing also has disadvantages. If the crop fails, it is the landlord, and not the tenant, who receives compensation. Also, women may feel less secure and less motivated to invest in the land, depending on the length of the lease.

Land purchase

Since 1994, DDS has also been supporting land purchase by groups of women, taking advantage of a lending scheme initiated by the Scheduled Caste Development Corporation of Andhra Pradesh. Leasing serves as a precursor to purchase, enabling women to judge the land's quality and potential productivity. In some cases, good harvests have enabled women to accumulate enough funds to buy additional land. Each woman is registered as a plot owner. Today, 24 women's groups in 14 villages are cultivating 474 acres of purchased land, each woman owning about one acre but cultivating it jointly with the other women. Finding land to purchase is difficult, since the desirable plots are often bought by others.

Benefits and challenges

By working together, women acquire many useful skills. They learn to survey and measure land, hire tractors or bullocks, travel to distant towns to meet government officials, obtain inputs and market the produce. Many women also find it useful to have the flexibility in labour input that collective cultivation allows. In addition, they can pool their different skills to best effect, and share costs.

During peak seasons, when wage labour demand is high, absenteeism can negatively affect production. The sangams impose penalties (as agreed by the group), and also call defaulters to account in their weekly meetings. The fact that women are all from the same village and are co-dependent in other ways also creates peer pressure against default. A conflict of priorities may also arise if sangam women also own some family land. It may also be hard to motivate people to stay together when individual cultivation becomes more profitable.

Source: Agarwal, Bina, 2003.

Integrated approaches to credit

Credit and savings systems must be designed to address women's gender-specific constraints. Some of the most successful examples are provided by organizations that combine credit delivery with other supporting activities. For instance, Pro Mujer in Peru operates an integrated credit and microenterprise training programme. It also offers training for women's health and family planning and facilitates access to health services (Copestake *et al.*, 2005). The Land Conservation and Smallholder Rehabilitation Project in Ghana, a

poverty-targeted group-lending project sponsored by IFAD, included successful negotiations with landowners and male leaders to improve women's access to irrigated land (Mayoux, 2009). The Bangladesh Rural Advancement Committee in Bangladesh combines a joint-liability approach with legal assistance, health and education services (Copestake and others, 2005). SEWA in India combines the provision of banking services with the formation of co-operatives to promote women's economic, social and political interests (Dasgupta, 2002). A good example of a design feature in savings that could facilitate women's control over their assets is offered by the case of the Opportunity International Bank in Malawi, which introduced biometric smart cards enabling illiterate customers with no official government identification to open and manage accounts by using their fingerprints. Quisumbing and Pandolfelli (2008) report that this innovative measure prevented the in-laws of a poor widow from accessing her bank account and hence protected her assets.

Gender constraints and related policies: key issues related to land and credit

Constraint	Limited access to land and credit is, like education, both a gender-intensified constraint and an imposed form of gender disadvantage (i.e. exacerbated by gender-blind policies).
Employment aspects	Land ownership is obviously most relevant to farm-related employment and earnings, with education as the more important determining factor in non-farm employment. Limited access to land also constrains access to other important productive assets such as credit. Both land and credit are crucial to enhance self-employment opportunities.
Geography	In all countries for which data are available, women are less likely to own land, and own less amounts of land when they do own it. Women's control over land reflects deep-rooted land tenure norms and laws, which vary considerably. Sub-Saharan Africa has the most diverse arrangements. The provision of microcredit is especially widespread in South Asia but also in other regions.
Policy recommendations	Policies need to focus not only on improving legislation and rights but especially on the enforcement of such rights. 'Collective approaches' focusing on integrated community-based programmes, that facilitate landless women's group formation, mobilize credit and promote environmentally friendly farming practices, are especially promising. Policy initiatives for gender-equitable finance cannot be limited to microcredit but must involve the development of more inclusive and women-friendly formal financial systems and complementary supporting services.

2.2.4. Unequal access to markets

2.2.4.a. Gender and unequal access to markets

Both domestic and international markets are gendered institutions. Unequal access to markets is another important source of gender disadvantage likely to undermine the achievement of decent rural employment. Gender-differentiated access to markets affects the ability of women and men to receive fair prices for their work and their produce, and to control the income they generate. It results from gender inequalities in access to resources such as capital, technology, information, education and land (some of these factors have been discussed in earlier sections). All these constraints interact with each other and influence the bargaining power of the various actors participating in the production, processing and sale of goods.

Women in many countries have to deal with cultural biases about what are considered appropriate modes of transportation for them (many women travel on foot and transport headloads, and their control over intermediate means of transport such as draught animals, bicycles and carts is limited) and often face harassment by market or trade officials. Their time constraints prevent them from travelling long distances and seeking the best prices for their output. Men are more likely to be approached by agricultural companies or other chain actors wanting to do business. Women may also face barriers to membership in rural organizations and cooperatives, which may further inhibit a channel to facilitate market access (Doss, 2001; Crowley *et al.*, 2006). Even in West African rural markets, despite the fame of the ‘market queens’ and despite the greater mobility of women relative to some regions in South Asia, it seems that women rarely achieve upward economic mobility. The economic resources necessary for the spatial and social mobility to amass wholesale consignments, command transport and/or own processing facilities are often in the hands of men (Harriss-White, 1998). These forms of inequality can be further exacerbated by gender-blind policies with respect to credit, land, transport, marketing schemes, training and unpaid care work.

Women increasingly supply national and international markets with both traditional and high-value produce but continue to face greater disadvantages than men. Barriers to participation in export markets are even higher because the constraints just described for domestic markets are compounded by problems of compliance with strict international food safety and phytosanitary standards. As a consequence, small-scale female producers find it especially difficult to become independently involved in international trade. As discussed in Part I, poor households, and particularly poor women, seem to be benefiting from incorporation into global value chains more through labour markets than through product markets.

Depending on the type of goods produced, the characteristics of the value chain and the institutional setting of the country, different policies are required to facilitate integration of rural women and men into national and international markets. A useful step for designing adequate interventions to promote better access of poor producers and workers to markets should involve undertaking a thorough gender-aware value-chain analysis so as to identify where measures to reduce inequalities can be taken and by whom.¹⁵

Measures to support market access will vary depending on whether the women concerned are producers or wage workers. Policies aimed at producers should mostly include: initiatives to improve market contacts and information on prices, as well as market analysis to identify high-value market opportunities; strengthening of property rights; better access to credit; technical assistance; and support for institutional strengthening of women’s groups and women’s inclusion, influence and negotiating power in farmer associations and trade unions. Policies for wage workers should involve: extending labour legislation beyond permanent workers; measures to ensure better enforcement of labour laws; measures to create greater awareness of legal rights; and more training.

15 An increasing number of value-chain interventions are being promoted by a variety of institutions, from international donors to local NGOs. There is a lot of anecdotal evidence about the benefits of value-chain interventions for the poor, but the number of thorough and independent impact assessments is very small (Humphrey and Navas-Alemann, forthcoming). For an excellent introduction to gender value-chain analysis, see Barrientos *et al.* (2003).

2.2.4.b. Policy responses

Self-employed small-scale producers

Studies show that high-value chains usually exclude asset-poor farmers (World Bank, 2007a). Entry into high-value chains may require having the ability to invest in greenhouses, irrigation and packing sheds. Dolan and Sorby (2003) find that contract farmers are more likely than non-contract farmers to own land and other assets and to have access to irrigation. Few of the contract households reviewed in their study were headed by women: 6 percent in Guatemala and less than 1 percent in Kenya. Moreover, smallholders in general, and women in particular, are likely to be in a weak position in negotiating terms and prices with powerful buyers because of limited experience and low levels of education.

An important avenue for smallholders to gain access to value chains is through involvement in producer organizations or cooperatives. Being part of an organization increases the bargaining power of farmers and may also be preferred by the large companies contracting the work because it simplifies procedures. This calls for the promotion of innovative institutional mechanisms that enable women to join groups, lead groups and remain active members. Measures to strengthen and increase knowledge of women's property rights and contractual rights, including their entitlements to land and financial skills (described in an earlier section) could also contribute to make their position relative to powerful actors in the chain stronger, and to increase their chances of obtaining loans to start cooperatives or enterprises.

Better access to information and communication technologies can be used successfully to find market contacts and information on prices – another important channel to strengthen smallholders' bargaining position. Mobile phones are increasingly used in many remote rural areas by women farmers to learn market prices for inputs and crops (e.g. Grameen Village Phone in Bangladesh and similar such initiatives in Cameroon, the Philippines, Rwanda and Uganda). In Senegal, the Grand Coast Fishing Operators Union, an organization of women who market fish, set up a website to promote their produce, monitor export markets and negotiate prices with overseas buyers before they arrive in the country (Hafkin and Taggart, 2001 quoted in World Bank, IFAD and FAO, 2009). In Samoa, a local NGO, Women in Business Development Incorporated, provided technical support to 13 cooperatives to enable them to produce organic virgin coconut oil for export markets. Market contacts in Australia and New Zealand were made with the assistance of the Internet (Cretney and Tafuna'i, 2004).

An initiative by the Mennonite Economic Development Associates (MEDA) and the Entrepreneurship Career Development Institute implemented in 2004–07 in Baluchistan, Punjab and Sindh (Pakistan) provides an interesting example of how women in conservative areas can be better linked with more lucrative markets. The project aimed at helping homebound women embroiderers in remote rural areas by strengthening their linkages with richer urban markets and adding value to their work by incorporating new designs. The project's activities were: a) recruitment and training of women sales agents to provide rural embroiderers with product development, access to quality input supplies and higher-value markets; b) linking of sales agents to buyers and designers; and c) capacity building for sales agents in product development and design. A particular strength of the project is its focus not only on inputs to the production process but also on the linkages between homebound female workers in isolated parts of the country and market outlets. According to MEDA's own evaluation, about 9 000 female rural embroiderers experienced

an increase in income from about US\$9 to US\$22 per month and also reported a greater sense of independence (MEDA, 2007).

Although data on the gender dimensions of smallholder contract farming are still sparse (an important knowledge gap that future research should aim to fill), it is known that companies usually contract with men. In Kenya, for instance, Dolan (1997) found that more than 90 percent of export contracts were issued to male household members, who controlled the household labour allocation and payment arrangements. When training and extension services are offered with contracts, it is essential that male extension agents are trained to meet the specific needs of female farmers and more female extension workers are recruited. It is also important that gender-focused agricultural development assistance does not target exclusively women heads of households, thus overlooking the vast majority of women who reside in male-headed households.

Wage workers

As described in earlier sections, women wage workers represent at least half of the employees of export-oriented high-value agriculture in many Latin American and sub-Saharan African countries. For example, women account for 79 percent of the workforce in floriculture in Zimbabwe (Dolan and Sorby, 2003) and 90 percent of the poultry workers in Brazil (Gammage *et al.*, 2006). We also noted that women predominate among the flexible and casual workforce because of a number of reasons, including employer discrimination and low levels of education.

Achieving more equitable poverty reduction through decent rural employment generation requires first of all that national labour legislations be extended beyond permanent workers. However, this is a necessary but not sufficient condition. Even when a piece of legislation is good, enforcement may be weak. Barrientos and Kritzingner (2004) suggest that an effective approach to secure decent work for women and men employed in global agriculture may involve enhancing synergy between regulatory and voluntary approaches. South Africa offers a good example of how this synergy can be achieved. It now has exemplary labour legislation, including the Employment Equity Act and the Basic Conditions of Employment Act, which also covers labour brokers. It also has a Wine Industry and Agriculture Ethical Trading Association (WIETA) which was set up to develop and monitor its own local code of labour practice based on ILO Conventions. WIETA members include trade unions, NGOs, producers, government and UK supermarkets. The inclusion of civil society organisations in WIETA has played an important role in ensuring that the conditions of casual women workers are addressed in social audits.

There are other successful cases in which labour laws have been extended to vulnerable workers, such as temporary workers in agriculture, domestic workers and HIV-affected workers. For example, a New Labour Act covering temporary workers was issued in Ghana in 2002 (Chen *et al.*, 2004). Labour relations regulations (HIV/AIDS) were adopted in Zimbabwe in 1998 (Chartier, 2005), and laws protecting women plantation workers were introduced in Brazil in the mid-1990s (World Bank, IFAD and FAO, 2009). Unfortunately the problem of enforcement of labour standards remains severe in most cases.

Codes of conduct can be useful in supporting national legislation but have more limitations than labour laws because they are voluntary, not well-monitored and apply to just a small fraction of the workforce (ILO, 2003; Barrientos and Smith, 2006). The Uganda Code of Practice for the horticulture sector appears to have led to an improvement in working

conditions for women in flower farms. All workers have a stable contract, are entitled to 60 days' paid maternity leave and have easy access to basic medical assistance (World Bank, IFAD and FAO, 2009). More research would be required to understand the success factors in this initiative.

Programmes to make female wage workers aware of their legal entitlements are also essential so that they can organize to demand them in an effective way. In Kenya, Tanzania, Uganda and Zambia, for example, Women Working Worldwide, a UK-based network organization, together with local trade unions, promoted rights awareness among 6 000 permanent and casual female workers. It appears that such training increased women's confidence and their ability to negotiate with employers, leading to greater women's unionization and creation of new women's committees. In Tanzania, farm managers were also trained on women workers' rights, resulting in a general improvement in worker-management relations and greater space for gender concerns in collective bargaining agreements (Women Working Worldwide, 2007, 2008).

Although the track record of women's participation in and leadership of trade unions is mostly poor, the case of the National Union of Plantation and Agricultural Workers (NUPAWU) in Uganda suggests that existing trade unions can play a relevant role in advancing women wage workers' rights, provided women are fully integrated in management and decision making (see Box I-5).

BOX I-5

The National Union of Plantation and Agricultural Workers (NUPAWU) in Uganda

NUPAWU represents workers in tea and sugar plantations as well as general agriculture, including flower farms, rice and other agriculture-related industries where women comprise the majority of workers. It has some 15 000 women members, who represent about 32 percent of current membership. The union has supported women's concerns since the 1970s, when over 100 women workers mobilized to demand clean water in the fields where sugar plantation workers and their families were housed. In the 1980s, branch-level women's committees elected by women members were formed on two sugar plantations. These committees were further mainstreamed throughout the organization with the support, among others, of an ILO/International Federation of Plantation, Agriculture and Allied Workers initiative for strengthening women in rural workers' organizations. NUPAWU established a Women Workers' Department in 1996, headed by a full-time national coordinator paid by the union. Six women regional coordinators covering tea, sugar and general agriculture were also appointed. In 2001, NUPAWU amended its constitution to provide women members with two permanent seats in the National Executive Council and guarantee positions for women in each branch executive committee. As further commitment to the promotion of women trade union leaders, NUPAWU's policy now requires that women comprise at least 30 percent of any trade union training programme.

NUPAWU promotes national campaigns against child labour, sexual harassment and pesticide hazards and supports reproductive health, HIV/AIDS, minimum wages and decent work. These campaigns receive tremendous support through the Women's Committee, which handles specific grievances from women and submits proposals. The Women's Committee mobilizes women around issues of immunization for children, improved hygiene and environmental conditions in the fields. Women's interests are protected through provisions in the Collective Bargaining Agreement, which includes a period of 60 days' maternity leave, seven days paternity leave, one-hour nursing breaks, prohibition of sexual harassment at the workplace and prohibition of child labour.

Other activities supported by NUPAWU include the Women's Drama Group, which uses the effective tool of theatre to run awareness campaigns among the government, enterprises and plantation communities, and courses for women activists.

Source: ILO 2003, Amuko 2000.

When women face obstacles to participating in mixed (male-dominated) groups, women-based groups may be the only alternative to represent female workers and help them in mobilizing (Crowley *et al.*, 2006). SEWA in India offers the best example of organizing women in both rural and urban areas. SEWA combines different forms of organization strategies: trade union activism, cooperative formation and provision of services such as health care, child care, insurance and housing to its members (Kabeer, 2008). However, it is not clear how easily the SEWA model could be replicated elsewhere.

Opportunities for training and promotion are more common among technicians, management and administrative staff, who tend to be men (Dolan and Sorby, 2003). There are only a few examples of good practice in training. In Thailand, the Sun Valley poultry company offers an educational plan to assist (mainly female) employees to advance within the firm (Lawler and Atmiyanandana, 1999 in Dolan and Sorby, 2003). Workers are also trained to perform multiple tasks to avoid repetitive-stress injuries. Health and safety training, together with information about workers' rights, is crucial to prevent health hazards at the workplace. In Uganda, for example, flower workers are provided with the opportunity of learning about fumigation and grading and how to tackle pests and diseases (Asea and Kaija, 2000).

Gender constraints and related policies: key issues related to market access

Constraint	Restricted access to markets (both national and international) results from cultural norms and from gender inequalities in the control of resources such as capital, agricultural inputs, technology, information, education and land.
Employment aspects	Limited access to markets undermines opportunities for decent work directly for the self-employed, in both agricultural and non-agricultural sectors. Limited access to international markets affects female wage workers too.
Geography	Women face disadvantage in accessing markets in most developing countries. Even in the West African context, where women have greater freedom of movement than in parts of Asia, females are more likely to be found trading in perishable goods commanding lower prices.
Policy recommendations	Policies aimed at improving market access for independent producers should include: initiatives to improve market contacts and information on prices; strengthening of property rights; better access to credit; and technical assistance. Policies for improving wage workers' conditions related to international market access should involve: extending labour legislation beyond permanent workers; measures to ensure better enforcement of labour laws; measures to create greater awareness of legal rights; and more training.

Policy lessons

Pathways out of poverty vary for rural women and men depending on socio-economic structures and institutional settings. A different policy mix is required in each setting to generate decent jobs and facilitate women's and men's equal access to them. Some broad policies are needed across the board, but their design and implementation will have to be context-specific.

The World Bank's recent World Development Report on agriculture (World Bank, 2007a) and the FAO report on Feeding the World in 2050 (FAO, 2009a) suggest that different groups of countries may follow different poverty reduction strategies. For instance, increasing the productivity of staple food production and enabling integration of landless labourers into dynamic agricultural export sectors are strategies most relevant for agriculture-based countries. A policy approach focused on encouraging workers' shift out of the agricultural sector into off-farm activities, possibly through secondary education and training, may be more appropriate for transforming and urbanized countries. This paper emphasizes that the formulation of these broad strategies should be informed by a thorough understanding of gender constraints in rural contexts and should include a number of policies aimed at overcoming them.

Measures to generate decent jobs must be designed in such a way as to reflect the complexity of gendered rural livelihoods. Policies to address rural poverty cannot be treated in isolation and hence it is also important to implement education, land and credit measures, as well as active labour market policies and social protection, in an integrated manner, understanding their interdependencies and fostering synergies. The evidence reviewed in this paper suggests that:

- In all circumstances, countries and settings, there is an urgent need to better acknowledge the important economic functions of unpaid activities and to implement measures for reducing and redistributing the burden of housework. This would be an essential step for promoting gender-equitable poverty reduction in rural areas, since the burden of this work falls disproportionately on women. Unpaid work limits women's access to all forms of paid rural employment. A combined approach that addresses weaknesses in physical and social infrastructure and that strengthens women's ability to make claims over their contributions is required.
- Public works programmes can be effectively used to support gender equality in rural employment, especially if genuine efforts are made to involve beneficiaries in the design of programmes from the outset. A truly gender-aware employment guarantee scheme (EGS) is one that fulfils the two objectives of: (1) making it easier for women to participate on equal terms as men (e.g. by providing child care on-site); and (2) creating useful assets that reduce aspects of women's domestic workloads (e.g. piped water). Public works do not have to be confined to physical infrastructure projects but can also offer social services and care for the community. However, if care services are provided through EGSs, special attention should be paid to ensure the quality and regularity of such services. Some of the most promising public works initiatives (from a gender perspective) can be found in Argentina, India and South Africa. A better understanding of the key determinants of success is required. Participation in an EGS can be an effective first step out of poverty for rural women only if their employability effectively improves once the scheme ends. To date, the record on this aspect appears rather weak across countries. There may be the risk that EGSs reinforce women's

subordinate position in the rural labour market. Finding ways to strengthen the skills-training component of these programmes and linkages with other segments of the labour market should therefore be a policy priority.

- Promoting female education in rural areas and trying to reduce gender educational gaps at primary and secondary levels is obviously important for a number of reasons in addition to the objective of improving access to decent employment. Greater attention should be paid to the type and quality of education, rather than to education per se. Formal education appears to be a more significant pathway out of poverty in transforming and urbanized countries (such as some Latin American and Southeast Asian countries), and in relation to non-agricultural work. Appropriately designed gender-aware extension services are more important determinants of labour productivity in agriculture-based contexts, especially in Africa. In both formal and non-formal education, rural girls and boys are treated differently and often channelled into different subject areas, reinforcing gender labour-market segregation. This is another important bias that needs to be challenged through innovative teaching methods, training of teachers and similar initiatives.
- Rural non-agricultural employment is a potential income source and a possible pathway out of rural poverty, but it is important to understand better under what circumstances it can lead to greater gender equality. Rural non-agricultural employment on average pays better than agriculture. It tends to be dominated by small-scale manufacturing (such as processing of food and other agricultural products), commerce and various forms of services (Haggblade et al., 2007). In the urbanized countries of Latin America, rural non-agricultural employment appears to be more prevalent among women than men, but women tend to be in the lowest-paid and most vulnerable forms of work, such as domestic services (domestic services in Brazil, for example, usually pay below the agricultural wage rate). When this is the case, non-agricultural employment is evidently not a route out of rural poverty but rather can contribute to reinforcing gender inequalities and stereotypes. Policies must avoid simply shifting low-productive agricultural employment into low-productive non-agricultural employment. Education is a key determinant of access to high-productivity rural non-agricultural employment, especially for female workers. Promotion of rural non-agricultural employment is a more viable option in countries with well-developed markets for non-agricultural goods and services.
- Constraints in access to land, credit and technology are mutually interdependent. Lack of access to land is an important obstacle but not necessarily the most binding constraint for women's agricultural productivity, especially in land-abundant countries. In land-scarce countries, such as India, innovative approaches involving small integrated programmes that support landless women's collective purchase of land, together with credit mobilization and environmentally friendly farming practices, appear especially promising but implementation is still limited to a few cases (e.g. the Deccan Development Society in Andhra Pradesh).
- Non-traditional agricultural exports offer an opportunity for generating quality employment for rural women and men, but there are also risks, especially for women, who are often the weakest nodes in the supply value chain. NTAEs are mostly developing in Latin America. Some NTAE production can be found in sub-Saharan Africa too, but it usually involves only a small share of the rural labour force. Rural women, and most smallholders in general, seem able to benefit from increased international trade more

through the labour market than through the product market. The formation of farmers' organizations, trade unions and cooperatives should be encouraged among smallholders, and women's participation (still rather limited) in them must be supported. Promoting synergies between labour legislation and voluntary codes of conduct appears to be a promising approach for maximizing women's employment gains from wage work in non-traditional agricultural exports. South Africa offers a good example of how this can be successfully accomplished, but enforcement of labour standards, especially among female workers and migrant workers, appears to be very weak in most countries. It remains a serious obstacle to the achievement of decent work.

- The introduction of new technology, either in NTAE plants or in other rural sectors, including in response to the need to protect the environment, may constitute a potential risk for the job security of rural women unless concerted efforts are made to provide skill upgrading and to ensure that employers retain their female labour force and remain committed to investing in their training.

The cases analysed in this paper make it clear that measures to create more gender-equitable employment must go hand in hand with interventions to protect and enforce rural women's and men's rights and policies to strengthen processes of organization, voice and representation, in the spirit of the ILO Decent Work Agenda.

More specifically, it is essential that countries continue to ratify fundamental ILO Conventions and, even more vitally, that the gender-equitable implementation of relevant labour standards, including those related to social security, safety and health, is ensured. Rural workers, and in particular women workers, must be covered more fully under national laws and regulations as well as in practice. Further research and action are much needed to foster innovative approaches for the effective and comprehensive representation of rural women's interests in the institutions of social dialogue. Rural organizations that mobilize and represent women are essential to create awareness around rights and to give women greater voice and bargaining power relative to their employers and their family members. A range of organization strategies exist, but it is difficult to say what works best in each particular context.

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PART II

Consequences of gender inequalities and policy options for gender equitable rural employment

Workshop contributions

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Introduction

Rural communities, where some 70 percent of the world's rural poor are concentrated, generally rely on agriculture, forestry, fisheries and livestock for their livelihoods. Within those communities, the poorest of the poor are often women and young girls (according to UNDP data, six out of ten of the world's poorest people are women) who lack regular and decent employment and income, and who may face hunger and/or malnutrition, poor access to health, education and productive assets, time poverty caused by disproportionate paid and unpaid work burdens and child labour.

Despite the low level of recognition given to their work, the socio-economic contribution of rural women to the welfare of their households and communities is immense. However, they also face many gender-specific constraints that need to be better understood and addressed by policy-makers in the fight against poverty.

These issues were discussed at the FAO-IFAD-ILO Workshop on “Gaps, trends and current research in gender dimensions of agriculture and rural employment: Differential pathways out of poverty”. Using examples from papers presented at the workshop,¹⁶ this chapter outlines issues addressed at the workshop, outlining and summarizing the crucial role gender dimensions play in forming appropriate policies to promote gender-equitable rural employment and combat rural poverty.

This chapter is composed of five sections:

- Section one explains the consequences of gender inequality and why it is such a key issue.
- Section two outlines the extent of this inequality.
- Section three analyses the reasons for existing gender inequalities.
- Section four introduces relevant current global issues in rural employment and gender.
- Section five concludes with some possible policy responses presented and discussed at the workshop.

1. Why does gender inequality in rural employment matter?

Aside from the fact that failure to provide women with equal opportunities is a violation of their human rights, there are a variety of reasons as to why addressing the plight of rural women and promoting policies which take gender dimensions into account makes good economic sense.

First, the fight against extreme poverty, as emphasized in the Millennium Development Goals (MDGs), necessitates specific attention being given to issues of gender equity, since women are disproportionately represented among the poor. This phenomenon is confirmed in cross-sectoral analyses of data from Cameroon, Laos, Madagascar, Mauritania and Tanzania by Gurkan and Sanogo (2009), which show that, in these countries, female headed households (FHHs) have a greater probability of being poor than male headed households (MHHs). Further evidence is provided for Brazil (Figueiredo and Branchi, 2009), where analysis revealed that being female has a positive and significant effect on the probability of being poor. This was also confirmed by (Tolstokorova, 2009) in the case of Ukraine, where women seem to be one of the groups most vulnerable to poverty. Given

¹⁶ The papers presented at the workshop can be found at <http://www.fao-ilo.org>.

women's disproportionate representation among the poor, policy frameworks designed to alleviate suffering cannot be devised without tackling the issue of gender inequality in rural employment and the related specific challenges faced by rural women.

Second, when gender equitable social and economic policies and institutions are in place, the potential for women to contribute to the overall development and well-being of their communities is enormous. It is well established that educating and providing women with opportunities to take part in skilled paid employment provides benefits to their families and communities in the form of lower fertility rates, decreased child mortality, increased child health and nutrition and improved levels of children's education. In the Philippines, this was highlighted by Salazar and Quisumbing (2009) who showed that higher participation by women in off-farm paid employment led to an improvement in the nutritional status of children. The decrease in the time mothers spent with their children was more than offset by the benefits realized through the greater levels of income controlled by women and generally allocated to improving their children's development. The transmission of greater bargaining power to women through more gender-equitable inheritance customs was also seen to be a factor which could contribute to the health and development of children.

Third, women face a variety of economic and social disadvantages which restrict their ability to acquire land and productive inputs, such as pesticides and fertilizers, and to access markets. This limits their potential contribution to the overall national economy. This is illustrated by Vigneri and Holmes (2009), who found that despite these restrictions, women cocoa farmers in Ghana were able to achieve similar yields to men. Thus, if they enjoyed the same level of inputs as men, they might produce even higher yields than men, leading to potential benefits for themselves and for Ghana's rural economy. The as yet untapped nature of this potential is an opportunity cost and demonstrates the importance of gender equity measures not only for women's welfare, but also for developing rural economies at large.

Fourth, recent trends in the feminization of agriculture mean that women are being increasingly marginalized in lower status, unskilled agricultural work. These trends have been particularly pronounced in Asia and Africa and are exemplified by the cases of China (Song *et al.*, 2009), Vietnam (Thin, 2009) and Philippines, Thailand and Vietnam (Paris *et al.*, 2009). Increasing migrations and the growth of non-agricultural job opportunities are mainly benefiting men with better paid and higher status jobs, while the women left behind in rural areas are often taking over men's agricultural work, though sometimes under long-distance supervision from their husbands. In some cases the remittances enable women to hire labour and/or place them in a higher-status managerial position, but in many other cases, the extra agricultural work (in addition to their other productive and domestic and caring work) increases women's burdens without necessarily improving their status, empowerment or control of family income. This can negatively affect women's and children's health and welfare.

Fifth, women seem to be trapped in the most vulnerable and unstable segments of the rural labour market, particularly in the agricultural sector. Jutting and Morrisson (2009) demonstrate the feminization of "bad" jobs (defined as jobs in which the remuneration does not provide for a basic minimum standard of living and protection against risk) in 28 developing countries from Africa, Asia and Latin America. In all but one of these countries, women were overrepresented in the "bad" or vulnerable forms of employment, such as family workers, while the stable jobs which brought with them social protection

TABLE II-1
Female and male employment status by country

Country	Year	Region	Ratio of Females to Males by Employment Status			
			Employers	Own Account Workers	Employees	Family Workers
Thailand	2007	Asia	0.48	0.50	0.96	2.39
Indonesia	2007	Asia	0.27	0.37	0.84	4.08
Philippines	2007	Asia	0.36	0.53	0.67	3.25
Malaysia	2007	Asia	0.74	0.62	0.29	4.67
Pakistan	2007	Asia	-	0.20	1.11	2.14
Bangladesh	2005	Asia	0.50	0.25	0.63	5.79
Peru	2007	LAC	0.19	1.22	1.04	2.03
Ecuador	2006	LAC	0.79	1.41	-	0.92
Chile	2007	LAC	0.87	0.69	1.14	1.97
Panama	2007	LAC	0.70	0.58	0.41	6.04
Costa Rica	2007	LAC	0.56	0.49	1.13	2.84
El Salvador	2006	LAC	0.60	0.55	1.14	1.37
Brazil	2004	LAC	0.17	0.31	0.28	2.21
Venezuela, RB	2007	LAC	0.88	0.87	0.71	8.18
Colombia	2002	LAC	0.64	0.95	0.67	3.05
Bolivia	2000	LAC	0.29	0.29	0.37	2.61
Tunisia	1994	MENA	0.13	0.47	0.45	5.84
Iran, Islamic Rep.	2007	MENA	0.09	0.27	0.46	4.01
Morocco	1994	MENA	0.11	0.28	0.34	2.11
Egypt, Arab Rep.	2006	MENA	0.12	-	-	2.91
Rwanda	1978	SSA	-	0.43	0.21	1.95
Cote d'Ivoire	1998	SSA	0.29	0.70	0.16	1.79
South Africa	2007	SSA	0.57	2.19	0.79	3.00
Madagascar	2003	SSA	0.38	0.59	0.93	1.69
Ethiopia	2005	SSA	0.22	0.31	0.21	2.07
Mali	1998	SSA	0.50	0.54	0.50	1.61
Togo	1981	SSA	-	0.96	0.00	1.32
Botswana	2001	SSA	2.29	2.15	0.74	0.97
Mauritius	2007	SSA	0.47	1.18	0.83	5.62

Source: Jütting and Morrisson, 2009.

overwhelmingly went to men. This can be seen in Table II-1, where women dominate unpaid family worker positions, while men are more likely to be self-employed or to be paid employees in the formal or informal sectors.

The predominance of poor women, whose families depend on their incomes for survival in predominantly unstable forms of employment lacking protection or insurance against adverse events, heightens the need for policy-makers to place gender equality considerations at the forefront of policy initiatives aimed at ensuring decent rural employment and fighting poverty.

Finally, the fight against child labour will fail unless parents can produce or earn sufficiently to ensure their family's livelihoods. Globally, an estimated 60 percent of the world's 218 million child labourers are working in agriculture (ILO Statistics 2010). Boys tend to help their fathers and girls their mothers. Thus, the unequal gender burden is reproduced in the next generation, as girls often have to work longer hours than their brothers to share their mothers' multiple productive, domestic and caring roles. Thus, while both boys and girls may have to forego school, girls' opportunities for schooling are often reduced further by cultural stereotypes against spending scarce resources on girls' education, as the benefits would later go to the husband's family when she marries or might make her less docile.

For all those reasons, which are highly interconnected, it is vital to promote rural employment policies which provide women with better opportunities for greater incomes, and empower them through political and economic participation in rural communities. Women with better paid, quality jobs can contribute to local development, to a better future for their children, and thereby, may break the intergenerational transmission of poverty.

2. The extent of gender inequality

There are many aspects and dimensions of gender disparities in rural employment. Employment segmentation between males and females enables men to dominate the more financially rewarding, higher skilled positions, while women prevail in unstable, unskilled and unpaid or poorly remunerated work segments. Participation rates in paid employment exhibit gender biases as do earnings, the latter extending beyond the level that can be explained merely by disparities in education and training.

2.1. Gender inequality and household distribution of work

In rural households, agricultural tasks such as growing commercial and food crops and managing livestock tend to overlap with "domestic" tasks such as husking and grinding grain or processing milk products. The former set of activities, which are often undertaken by men as well as women, are counted in national income statistics while the latter, which are predominantly women's work, are often invisible in national statistics and swept into the basket of "non-economic" domestic work. Although some attempts are now being made to give such processing work an economic value and to record it in national statistics, this is still far from universal. This reflects the invisibility of much of women's work despite its vital importance for household survival, and despite the recognition of this problem four decades ago by Boserup (1970). The invisibility is itself due in part to the low status of women and their work in rural communities; intra-

TABLE II-2
Variation of household and agricultural roles across age in Zimbabwe

Household and agricultural roles	Children	Active women	Active men	Old Age
Household domestic work	x	x		x
Care of children	x	x		x
Fetching wood for fuel	x	x	x	x
Household shopping		x		
Tending of gardens	x	x		
Preparation of foodstuffs - grinding maize, groundnuts	x	x		
Livestock management, herding cattle, taking them to the dip tanks	x	x	x	
Gathering of wild fruits and vegetables	x	x		
Road-side selling	x	x		
Tree felling		x	x	
Hunting			x	
Supervising men's and women's activities			x	
Fence repairs, welding, etc.			x	

Source: Muza, 2009. *Household survey conducted in December 2008.*

household gender inequality in access to assets and decision-making power; and biases of urban-based statisticians and policy-makers who fail to question how households ensure their livelihoods and whether there is gender equity in roles and benefits.

Nonetheless, despite the lack of reliable statistics, rural women's work is pervasive throughout rural economies, contributing a multitude of roles which include agricultural production and marketing, food processing and distribution, fuel and water collection, house cleaning and laundry, child rearing and education, caring for the elderly and sick, gathering of wild fruits and vegetables and household shopping. This was illustrated, for example, in the workshop paper on Zimbabwe (Muza, 2009), where rural women are involved in nearly all forms of work, yet their contribution is given an extremely low market value due to a patriarchal ideology and existing gender biases which fail to acknowledge the social and economic value of women's work (see Table II-2).

2.2. Employment segmentation and participation rates

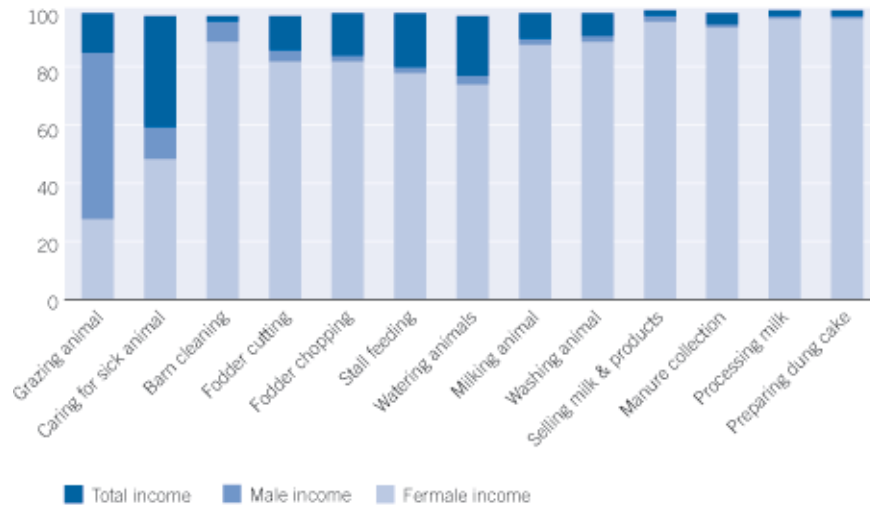
2.2.1. In agricultural sectors

Women tend to be the main producers of food, while men manage most of the commercial crops, not without women's (often unpaid) contributions (except in some countries in Asia). In some regions, women have greater involvement in livestock-related activities than men.

GRAPH II-1

Gender roles in animal agriculture in Punjab, Pakistan

(percent)

Source: Tibbo *et al.*, 2009.

In the case of the Punjab province of Pakistan (Tibbo *et al.* 2009), most livestock-related activities are undertaken by women (see Graph II-1), who play a major role in barn cleaning, fodder cutting and chopping, stall feeding, watering, washing, milking and processing milk by-products into food items (e.g. cheese, butter, yoghurt), collecting manure and preparing dung cake. Grazing is the core responsibility of the men, although women also graze animals in the periphery of villages and on fallow lands near the homestead, since cultural norms do not permit them to travel far on their own. Women were found to be largely independent in spending their own earned income, although other income sources were overwhelmingly controlled by men.

The same kind of segmentation is observed in Afghanistan (Ashrafi, 2009), where men are responsible for herding, preparing/purchasing feed and making shelter for livestock, while women focus more on daily animal care and the processing of milk. However, some tasks are shared between men and women (such as marketing animals and their products). Despite women's involvement in livestock-related activities, there are few ways of acquiring livestock, except through inheritance. Women were often found to have a large degree of control over income derived from livestock produce, indicating the potential improvements in their welfare and empowerment that could occur if their access to livestock could be increased.

Worldwide, when women also participate in agricultural markets (either in the context of commercial farming or traditional farming selling surpluses locally), it is usually within a rigid division of tasks. Asymmetry exists, since men may take over women's crops if new technologies make these crops more remunerative than the traditional male crops, while women rarely take over men's crops (except when men migrate). However, in recent years women are benefiting increasingly from wage employment in large-scale estate production and agro-industrial processing of non-traditional products, rather than from high-value smallholder contract farming, although this is still a relatively small sector compared with traditional agriculture.

This situation was exemplified by a study in Senegal (Maertens and Swinnen, 2009), where women perform a large share of the work in modern tomato and French bean supply chains, either as family labourers on contracted plots controlled by men or as hired workers in the agro-industry. Yet women's control over household income is strongly correlated with their access to labour markets and paid employment. Therefore, the way households benefit from modern supply chains, through product-market channels or labour market channels, and the way women are employed (as unpaid family farm workers or as hired agro-industrial employees), has major implications for the intra-household control over the income derived from these activities.

As men mainly deal with the contractors, they usually receive and directly control the income derived from high-value contract-farming. In this case, women may provide a large part of the work in high-value contract production, controlled by their husbands or other male relatives, without getting full benefits of their labour since, as family workers, they remain unpaid or inadequately remunerated. On the contrary, women employed in modern agro-industries may benefit more directly, being themselves the "contracted party" in the labour agreement with the companies and directly receiving the cash wages related to their labour. These wages earned outside the family farm (and outside other family businesses) increase total household income and can contribute to strengthening women's bargaining power within the household, thus benefiting their economic independence and empowerment.

In Uzbekistan, Alimdjanova (2009) has confirmed the existence of employment segmentation. Women were found to dominate health care and education sectors, while female employees comprised less than 15 percent of the workforce in public administration, transport and communication and construction. Familial and societal expectations of women as being more suited to typically lower-status and lower-paying care-giving professions were reflected in girls' educational choices and in the subject content taught in typically female training courses.

Globally, employment rates for rural men are higher than for rural women, and the discrepancy is much larger in the non-agricultural sectors, meaning that rural women have more employment opportunities in agriculture than in any other sector. Ukraine (Tolstokorova, 2009) is a good example of that: men represent some 57 percent of the rural workforce compared with 43 percent for women, but women are heavily concentrated in agriculture: they constitute 40 percent of the agricultural labour force but hardly reach 27.5 percent of the staff employed in health, education and culture. Men predominate in all sectors, (up to 96 percent in transport and public communications), including in agriculture.

2.2.2. In non-agricultural sectors

Domestic services are the most prevalent form of rural non-agricultural employment for women in all regions, particularly in Latin America. Petty trade is very common among rural women in Africa, Latin America and some Southeast Asian countries, and in South Asia most female non-agricultural rural activities are home-based.

In some more conservative countries, for example, Afghanistan and Pakistan (Tibbo *et al.*, 2009 and Ashrafi, 2009), women are largely denied off-farm income-generating activities because of sociocultural norms which restrict them from moving outside of their homestead. Moreover, limited access by girls to education has largely hampered their employability and competitiveness.

Women's paid employment has an important impact on children's nutrition and health status, on educational achievements and access to future income-generating activities. In the case of the Philippines (Salazar and Quisumbing, 2009), women's participation in off-farm paid activities has to be considered as an important path out of poverty in rural areas. Indeed, if the productivity of individuals in rural areas is positively related to their health, and if better health status is associated with higher income, women's participation in off-farm paid activities can serve as a tool to break the circle of intergenerational transmission of poverty.

A similar conclusion was reached in the Ethiopia study (Kimhi, 2009), which shows that female non-farm labour income is the only income source that significantly reduces per capita income inequality. Thus, increasing the opportunities for women to engage in self-employment activities is likely to have a larger impact on disadvantaged households and therefore reduces inequality (all other income sources remaining constant).

2.3. Gender gaps in earnings

Sex-disaggregated data on agricultural earnings indicates a marked gender disparity in wage rates. Such disparities also prevail in the OECD countries, and are more pronounced in some countries/regions (e.g. Afghanistan and Pakistan). Gender wage gaps seem to be lower in some of the NTAE sectors (e.g. Kenya, Senegal, South Africa and Mexico) and larger in agricultural self-employment (e.g. Costa Rica, El Salvador and Ghana).

For example, the India study (Srivastava and Srivastava, 2009) shows a marked gender disparity in wages in agricultural and non-agricultural employment, as well as significantly lower wages for both men and women casual agricultural labourers compared with non-agricultural labourers (Table II-3).

TABLE II-3

Wages and percentage distribution of workers by agriculture and non-agriculture and by employment status, India, 2004-2005

Industry	% distribution		Wages (Rs. per day)			F/M Wages
	Male	Female	Male	Female	Average (M+F)	
Casual Labour						
Agriculture	70.6	89.5	47.9	33.2	42.5	69%
Non-agriculture	29.4	10.5	67.5	44.0	63.8	65%
Total	100.0	100.0	54.6	34.7	48.5	64%
Regular Workers						
Agriculture	9.9	11.0	68.1	53.7	65.2	79%
Non-agriculture	90.1	89.0	151.1	86.3	139.1	57%
Total	100.0	100.0	143.0	82.9	131.8	58%

Source: Srivastava and Srivastava, 2009.

Another interesting point in Table II-3 is given by the comparison of the female/male wage ratios in agricultural versus in non-agricultural employment, for casual labourers and regular workers. The last column of this table indicates that:

- for both casual and regular workers, women receive lower wages than men (i.e. wages between 57 percent and almost 80 percent of men's wages);
- women employed as regular workers are less discriminated against in agriculture (where they get 79 percent of the male wage) than in the other non-agriculture sectors (which pay women only 57 percent of the male wage); however, this is not the case when women work as casual labourers. This shows that women who manage to enter the formal agricultural labour market can be better remunerated; their specific competencies are given a value that is not recognized "economically" in non-agricultural work.

As observed by Figueiredo and Branchi (2009) in Brazil between 1992 and 2007, female per capita income increased in real terms by 66.4 percent, considering all sources, and by 53.7 percent considering primary job earnings only (i.e. agriculture) (see Table II-4). The smaller difference between male and female earnings may be related to better education and engagement in the formal labour market.

In spite of this progress, there is still evidence of important gender earning gaps in agriculture since female labour earnings averaged 62 percent of male labour earnings in 2007, when considering only the primary job (agriculture). When accumulating all sources of income, female incomes reach almost 73 percent of male incomes, mostly

TABLE II-4

Farm workers' average earnings by gender. Brazil, 1992, 1999 and 2007

(minimum wage)*

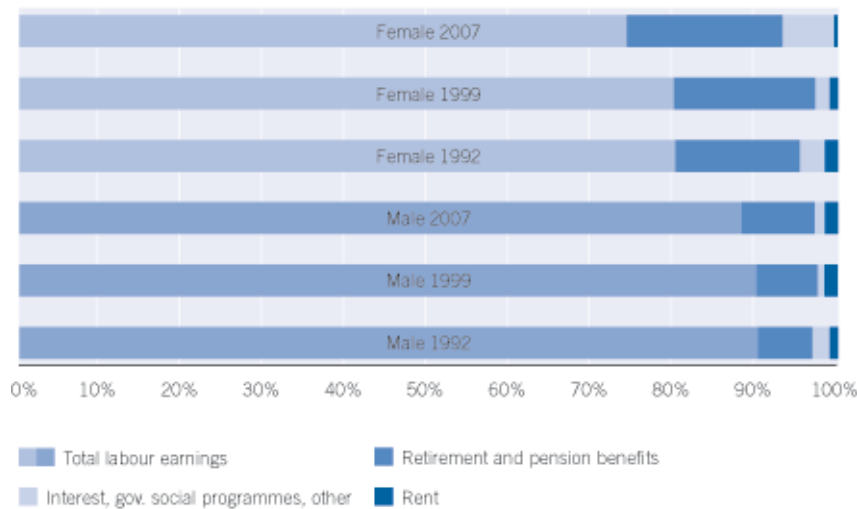
	Taking only income from primary job (agriculture)	F/M earnings	Cumulating all labour sources	F/M earnings	Cumulating all sources of income (labour + public transfers)	F/M earnings
Female						
1992	0.68	49.2%	0.70	48.6%	0.87	54.4%
1999	0.75	54.7%	0.77	53.1%	0.96	59.6%
2007	1.04	61.9%	1.07	61.1%	1.45	72.9%
% 1992-2007	53.70		53.70		66.40	
Male						
1992	1.38		1.44		1.60	
1999	1.37		1.45		1.61	
2007	1.68		1.75		1.99	
% 1992-2007	21.00		21.30		24.40	

Source: Figueiredo and Branchi, 2009 – Elaborated from PNADs 1992, 1999 and 2007.

* as cited in Figueiredo and Branchi, 2009, current values were deflated by the INPC (National Consumer Price Index) controlling for the minimum wage purchasing power, according to Corseuil and Foguel (2002).

GRAPH II-2

Composition of farm workers' income by gender – Brazil, 1992, 1999 and 2007
(percent)



Source: Figueiredo and Branchi, 2009 (elaborated from PNADs 1992, 1999 and 2007).

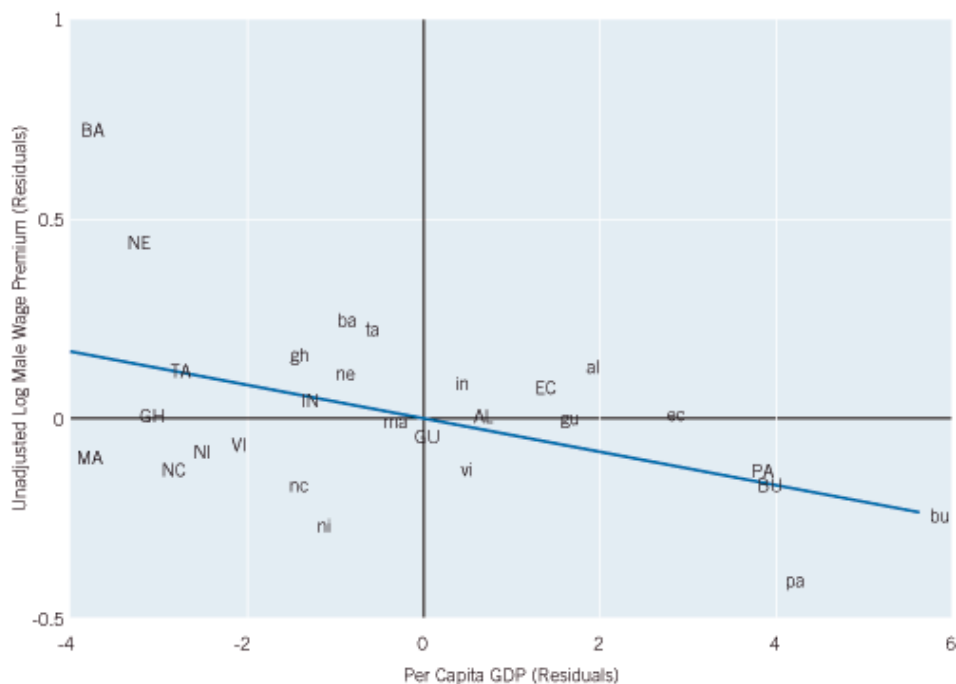
because of pensions, retirement benefits and measures that include interest payments, dividends and government social programme benefits directed at the family (most of which are cash transfers paid directly to women).¹⁷

Graph II-2 shows the composition of personal income, according to its principal components. The weight of the component that includes cash transfers to female workers has significantly increased over the years.

In the Philippines, Thailand and Vietnam (King Dejardin and Bigotta, 2009) economic growth has led to a narrowing of the rural gendered pay gap. However, by decomposing this pay gap into an explained part (that is attributable to different levels of human capital among workers) and an unexplained part (that is due to gender bias or gender-based discrimination), the authors demonstrate that gender inequalities in earnings may actually be significantly higher than what is generally thought to be the case. Women's higher level of education than men's and their increased participation in waged employment did not contribute as much as they would have thought in reducing the wage gap. The persistence of an unexplained gendered wage gap, which is much larger than the explained part, suggests the presence of systematic gender-based discrimination in pay which has no basis in the relative education, productivity or skill of workers.

Finally, Hertz *et al.* (2009) have shown that the gender bias in society has an important impact on wages. There is some evidence that the gender wage premium falls with economic growth (see Graph II-3). Still, raising the income of rural women requires dealing not just with the lack of rural non-farm employment, but with the gender bias itself, since about three-quarters of these wage gaps cannot be attributed to differences in assets (e.g. land, education) held by men and women (see full paper in Chapter 3).

¹⁷ Unfortunately, the PNAD questionnaire combined all these income sources into a single question, which makes it impossible to precisely evaluate the portion corresponding to government cash transfers within programmes like combating famine, family farming and rural development. For the agricultural workers, it is unlikely that the portion corresponding to interest and dividends on average is substantial.

GRAPH II-3**Male log wage premium versus per capita income**

Source: Hertz et al., 2009.

3. What are the causes of women's disadvantaged position?

Gender inequitable rural employment outcomes persist because of a range of interlinked social, economic and political factors. This section sets out the specific causes of these outcomes, bearing in mind that, to a large extent, it is gender-biased social institutions which form the platform upon which these factors are built, interact and are reinforced.

3.1. The invisible but powerful role of social institutions

Social institutions refer to evolved practices with stable rules of behaviour that are outside the formal system (Sen, 2007, as cited in Jutting and Morrison, 2009). They include the traditions, customs and social norms that govern the intricate workings of (especially) rural societies. These typically and overwhelmingly act as a constraint on women's activities and restrict their ability to compete on an even footing with men in the employment market.

Patriarchal ideologies, steeped in traditional customs and culture, underlie the workings of most rural societies. The following ideologies frequently dictate the type of work which is available to women and the conditions in which this work takes place, leading to unequal employment opportunities and gender differentiated welfare:

- Commonly held views that it is a woman's obligation to work in the home, undertaking reproductive and unpaid tasks, restrict female participation in paid employment;
- Beliefs that women are less able to manage assets, which are engrained and erroneous, as documented in studies carried out in Afghanistan by Ashrafi (2009) and in Ghana

by Vigneri and Holmes (2009), effectively diminish women's opportunities to take part in skilled and non-farm employment;

- Social restrictions on women's movement in conservative societies limit their access to decent employment opportunities. For example, a World Bank study in Morocco (mentioned in Jutting and Morrisson, 2009) revealed that 85 percent of women are required to obtain their husbands or guardians permission before they could leave the house;
- Patriarchal norms largely account for women's restricted role in decision-making at household, community, regional and national levels. This lack of female voice reinforces women's own sense of self and underpins the continuance of the economic and social realities which make women unable to compete equally in employment markets (Hambly Odame and Sarapura, 2009);
- Social institutions also play an indirect role through their influence on formal systems. Commonly held beliefs on the roles of men and women, social norms and customs, and culture form the platform upon which rules governing the operation of formal systems are built, including producers' associations and microcredit institutions (see Hambly Odame and Sarapura, 2009). It is hardly surprising, given the dominance of patriarchal ideologies, that laws and regulations often remain gender unequal. Thus, beyond being restricted by cultural expectations and ideologies regarding their activities, women are also disadvantaged by laws which preclude or constrain their access to land, livestock, productive inputs and finance.

3.2. The burden of domestic work and time poverty

The presence of rigid, socially sanctioned gender roles in rural societies severely constrains women's choices regarding how they allocate their time among different paid and unpaid productive and household activities, giving rise to the incidence of time poverty. Culture, religious beliefs and social norms are all factors which dictate that unpaid domestic and reproductive activities (such as water collection, child care, cooking and washing clothes) are the domain of female members of the household. This is precisely the situation in rural Africa, as R. Serra articulates in her recent study (2009), summarized in Box II-1.

The effects of this domestic burden on women's economic opportunities are damaging and predictable but often neglected in policies aimed at increasing female participation in productive paid employment. Several aspects of this problem must be considered:

BOX II-1

The time factor

Interventions to give African rural women better access to credit, land or other inputs have at times failed to encourage women to take up more profitable, productive activities – the main constraint being the inability to mobilize sufficient labour resources to make these options worthwhile. The paper proposes a theoretical model that shows women's choices may be critically constrained by the rigidities governing their time use. These are partly governed by social norms that regard certain tasks as being purely female. Policies that provide high-return work opportunities for women but which are oblivious to their overall time constraints, may actually deteriorate women's living conditions. There is a need to make household production more visible when addressing the question of increased rural incomes or economic diversification.

Source: Serra, 2009.

First, the time burden of rural women's domestic unpaid work and the lack of substitutability of female labour in household work by men serve to limit women's choices with regards to accessing paid employment. Activities that are time intensive and physically arduous (e.g. loading and fetching indispensable household goods like water and fuel) are generally the domain of female household members, with little help from males. Lack of infrastructure, such as running water, fuel-efficient stoves and electricity, exacerbate women's unequal burden. Consequently, inequalities in the amount of time available to women and men to devote to paid employment play a significant role in delivering the unequal outcomes previously outlined. Furthermore, even in the absence of cultural restrictions, time poverty restricts women from taking advantage of employment opportunities which require travel or migration far from their rural homes.

Second, time poverty may be a significant factor in men's dominance of riskier but also more lucrative types of work. The probability of success of a given venture is at least partly determined by the amount of time invested in it (that is, the degree of risk can be endogenous). Accordingly, the relative scarcity of time for women naturally leads to their having fewer opportunities than men to pursue such ventures (Serra, 2009). Related issues of risk adversity will be discussed in section 3.7.

Third, female time poverty contributes to unequal education outcomes which, in turn, hinder women from competing with men for more skilled, better paid jobs. When men do not substitute for women in domestic labour, female children are often called on to share this burden (boys are generally sent to the fields, but they have fewer working hours). This, combined with gender discrimination, often results in lower school enrolments and attainments for girls and reinforces girls' weaker position in the labour market. However, in some cases, in particular in Latin American countries, boys are withdrawn from school to work in agriculture, and this worsens their educational levels relative to girls.

3.3. Unequal access to assets

Laws, traditions and social norms often prevent women from gaining equitable access to and control of assets. The situation is aptly described by Raj Kumari, a woman from the Etawah District in India (as cited in Kelkar, 2009):

"Women never control any assets... Land is passed on from father to son. Even jewellery that is gifted to a woman on her marriage is not given to her; it is kept by the parents-in-law. If a man dies or remarries, the woman is completely dependent on others for survival."

In many countries, gender-biased inheritance and property and land tenure laws restrict women's ability to own assets. Even in areas where women do have use rights, gender-biased social customs and norms (see section 3.1) often restrict their opportunities of gaining equal use of assets. Unequal access to assets undermines women's economic performance for a number of reasons.

The study conducted by R. Pellizzoli (2009) in Box II-2 mentions, however, that access to assets is not enough if women do not have the relevant tools to optimally utilize them (in this case study, the lack of adequate resources to manage irrigation systems efficiently is critical).

BOX II-2**Access and control over the assets**

In Chókwè, in southern Mozambique, women account for more than 30 percent of total registered farmers, although their actual numbers could be twice that given that plots are usually registered in the name of a family member or relative. Women have had and still have the same right as men to obtain a land title, provided there is a vacant plot in the irrigation scheme. In Chókwè, the problem for women is not accessing land, but the use that they make of it and the factors that influence this use and reduce women's livelihood possibilities: lack of time and financial capacity to acquire new skills in farming, to differentiate crops and to commercialize them; the amount of productive and reproductive work that has to be carried out by women; and the high rates of HIV and AIDS infection in the area.

Women of Chókwè hold a title to their plot, but this is not sufficient insurance against the risk of landlessness: land tenure security in Chókwè depends on individual (and group) capacity to meet the criteria of productivity of the irrigation scheme management. The scheme management's expressed desire that irrigated land be used to grow cash crops creates further difficulties, particularly for women farmers. Factors that inhibit women from satisfying the conditions set out by the scheme management, leading to the possibility of their losing the land or having their use of the land restricted in the future include: unavailability of credit; lack of marketing and processing facilities, and limited control over price; gender inequities in local and national decision-making bodies; unsuitability of rice for export and cheapness of imported rice; lack of education and productive know-how; poor quality and unavailability of productive inputs; and other difficulties such as the migration of young labourers to South Africa.

In another analysis of the Massaca irrigation scheme in Maputo Province (Vijfhuizen, 2001), women, who comprised 70 percent of the members of a 144-hectare scheme built by a development project of the Italian Cooperation, lost control over their irrigated lands, to the advantage of men from the local community and from outside. In a context of growing commercial values of irrigated land, women's inability to access or control other forms of income and therefore scarce access to farming inputs and resources made it very difficult for them to raise enough money to pay the water fee – meaning that many of them (especially widows, divorced women and single mothers) were forced to rent or sell the irrigated parcel and return to rain-fed agriculture. Stressing the importance of access to irrigated land for women's livelihoods and for households' food security in rural areas, the study suggests that – notwithstanding land's potential for commercial agriculture – the management of the irrigation scheme has to consider the social value of that land too: "There is more to irrigated land than mere soil".

Source: Pellizzoli, 2009

3.3.1. Low access to assets affects women's bargaining power

Initially, the very fact that women tend to bring fewer assets than men into marriage is crucial. Assets and wealth (or lack thereof) influence women's status and bargaining power in the household, as explained in an anonymous collective discussion in Bangladesh (Kelkar, Nathan and Jahan, 2004; as cited in Kelkar 2009):

"If you have no money, there is no value for your choice. You are sitting in a corner like a little thief... if you have assets, everyone loves you."

As well as having broad implications for intra-household relations and the welfare of children, women's lack of bargaining power in the household is reflected in decisions regarding production, consumption and human capital formation. In addition, research has indicated that lack of bargaining power is responsible for women having restricted access to information regarding new technologies and innovations in agricultural production (such as, for example, new techniques for preventing livestock diseases). These effects combine to ensure that women's opportunities of participating in skilled

and better paid forms of employment are restricted, with the result that low-paid, low-skill jobs tend to be dominated by women. Certainly, lack of household bargaining power resulting from limited access to assets is one of the key factors behind gender unequal outcomes in rural employment markets.

3.3.2. Lack of access to assets and gender bias: a vicious circle

Women's lack of access to assets acts as a self-perpetuating cycle which only serves to strengthen already existing gender biases in employment opportunities. Without assets to act as collateral, it becomes more difficult for women to access credit to purchase property and productive inputs. Initiatives such as the Grameen Bank have been set up with the aim of alleviating this constraint. Though the Bank has been lauded for its contribution to improving the opportunities and livelihoods of poor households and communities, from a purely gender perspective (despite the fact that 97 percent of borrowers are women), the study carried out by Chowdhury, 2009 casts doubt on its success in providing women with the means to set up microenterprises of their own, as is illustrated in Box II-3.

Also, women's limited means of attaining the use of key productive assets such as land, water and livestock minimizes their capacity to use what assets they do have access to in a productive way. This further undermines their opportunities of taking part in skilled productive activities. (The overall ability of women to utilize assets as productively, or more productively, than men when given opportunities to do so should not be doubted, as Vigneri and Holmes showed with their research on the Ghanaian cocoa sector referred to in section I). This is exactly the situation which is observed in Afghanistan, as can be seen in Box II-4 (Ashrafi, 2009).

BOX II-3

Microcredit schemes in Bangladesh

This study highlighted that the Grameen Bank came into existence in the 1970s as a response to the credit constraints of poor people in starting microenterprises. The instalment-based small loans (i.e. microcredit) are given to poor people without collateral, and women are specifically targeted for the loans. In Bangladesh, 97 percent of the members are women, and it could be assumed that access to microcredit helps women members of the Grameen Bank to start microenterprises that are owned and managed by them.

However, results indicate that women members are not using their microcredit loans to start microenterprises. This is largely a result of cultural and religious values within Bangladesh, where the sociocultural environment is not conducive for women to start a microenterprise of their own. In spite of some positive changes in sociocultural attitudes of the society towards women's participation in economic activities in the last two decades, in rural areas it is still regarded as unacceptable for women to run their businesses outside the home.

Microcredit loans to women were found to benefit families through their positive effect on husbands' ability to start microenterprises and expand the capital of existing ones. Such family businesses may have welfare-enhancing effects on women themselves. The loans, therefore, have played an important role in poverty reduction and development of local economies, although their ability to empower women has been less than what was envisaged.

Source: Chowdhury, 2009.

3.3.3. Lack of secure land access undermines attempts to empower rural women

As described in the paper by *Doss et al.* (2009), the complexity and inequality in land tenure systems is a key determinant of the outcomes of projects designed to help (particularly) female agricultural workers. Projects enabling women to improve land or labour productivity have sometimes led to negative outcomes. This can be, among other things, the result of women's insecure land tenure which enables men to take over the land if the land, or new crops introduced by projects, become more profitable. Thus, projects specifically designed to help rural women farmers and workers have, on occasion, actually worsened their positions as a result of gender-biased land tenure practices and the lack of a legal framework to protect the rights of women to have equitable access to assets.

BOX II-4

Access to productive assets

Land, water and livestock

Of the many productive assets that contribute to increased income and well-being of rural populations, land, water and livestock are perhaps the most powerful. For women, secure access to or ownership of, land and livestock increases their decision-making power within the household. Moreover, women are often able to control the income gained from the sale of livestock products, and these assets can become bargaining tools for better care from relatives when women reach old age. Despite such potential, many women do not have secure access to, let alone ownership of, these critical assets. As only one example, the Afghanistan study (Ashrafi, 2009) indicated that few women own land that was not inherited. An analysis found that of 360 households studied, only 1.87 percent of women owned land by themselves and only 11 percent of women owned livestock individually, and these were almost all widows. The two main possibilities for gaining ownership of land and livestock are described below.

Women owning livestock in Afghanistan: Jaz

At the time of marriage, women receive mostly small household items and clothes from their parents. In both the Badakhshan and Bamyan villages, women receive livestock through a tradition known as Jaz – the first visit of a new bride to her parental home after marriage (this appears to be a form of pre-mortem inheritance). The woman then takes the animals to her marital home. In theory, the animals belong to her, but whether this ownership is respected and whether it translates into control over the animals and their produce varies from household to household. In some cases, the husband's parents take control and even sell the animals without asking the woman's permission. In other cases, other household members will consult her before making decisions over the animals and their produce.

Borrowing livestock

Women in both of the villages in Badakhshan access livestock such as sheep, goats and cows through a local practice of borrowing animals from wealthier households. In some cases, because women are fully responsible for arranging this, they are considered to own the animals, although this appears to depend on the relations inside the household. Several women said they have authority to sell the animals they obtained through this system without anyone's permission, and that if anyone else wants to sell them they have to ask them. In a few cases, where women had acquired several animals through borrowing, men said that women were able to keep one of the animals and decide what to do with the animal; if they choose to sell it they can decide how to use the income. Where women cannot control decisions about the sale of an animal, they often have some control over the animal produce, which women in all the villages were found to trade inside the village, and in some cases, the women may decide how to use the income.

Source: Ashrafi, 2009.

The potential costs of women's insecure and unequal access to housing is high. Secure tenure over housing reduces vulnerability, and ownership of housing reduces the likelihood of falling into poverty. The productive nature of housing may be especially true for rural women, who frequently operate small businesses out of their homes, selling items such as cooked or processed food. Women's vulnerability and ability to earn a livelihood may depend on secure access to housing. Depending on tenure and family arrangements, women may lose their homes when their household dissolves. Reports of women being evicted from their homes when their husband dies of HIV/AIDS are common in parts of Southern and Eastern Africa. At the same time, there are large variations in tenure patterns for housing, including differing rights of individual household members to a particular dwelling.

3.3.4. Lack of access to transport further worsens rural women's conditions

The frequent unavailability of basic transport-related assets (e.g. vehicles, bikes, horses, donkeys, oxen or carts) to help women in their work, including going to markets, health centres or banks, is another explanatory factor in gender-unequal rural employment outcomes. There are two relevant issues here: the scarcity of such transport assets, and the tendency for such assets, where available, to be chiefly controlled by the male household head. Given the predominance of women in household tasks, such as collecting water and fuelwood, women's restricted access to crucial transport assets only serves to increase their time burden so they have less time to devote to income-generating activities and to investing in their own education. The situation in rural Tanzania (Gutierrez, 2009) (see Box II-5) is indicative of rural regions throughout the world.

BOX II-5

Gender aspects of rural transport in Makete District, Tanzania

Patterns of travel and mobility are different among household members, and women's patterns are more time-consuming and burdensome. A survey of the transport and production activities of rural households was conducted for a sample of 431 households in the Makete district from 1986-1987.

The findings demonstrated that:

- 90 percent of all the trips and 95 percent of the total weight of transporting productive and reproductive things occurred within and around the village.
- In a year, transport activities occupied 2 500 hours and involved moving a load of about 23 tonnes.
- On average, women are responsible for nearly 67 percent of transportation of goods and 85 percent of the load carried. The rest of the transport burden is carried by men and children. Men are responsible for only 21 percent of the time spent in travel activities and 11 percent of the load.
- The average adult woman makes more than three trips per day. She spends over four hours per day, or more than 1 500 hours per year, solely on transport (usually fuel and water). In contrast, men make about one trip per day and devote less than two hours per day to transport activities.
- On average, women in Makete move about 50 kg daily, or nearly 18 tonnes per year. Men, in contrast, move about six kg per day (2.2 tonnes per year).
- More than 90 percent of the trips are by foot. This applies to trips within and outside the village.
- Nearly the entire load is carried by head-loading.

Source: Sieber, Niklas. *Appropriate transport and rural development in Makete district, Tanzania* (as cited in Gutierrez, 2009).

TABLE II-5

Distribution of rural agricultural workers by educational attainment, India, 2004-2005
(percent)

Education level	Agricultural labourers			Farmers		
	Male	Female	Average	Male	Female	Average
Illiterate and below primary	65.9	85.5	74.1	45.7	74	57.5
Primary	15.7	7.5	12.3	16.2	10.8	14
Middle	13.3	5.3	10	18.9	9.5	15
Secondary	3.7	1.2	2.6	10.3	3.9	7.6
HS & above	1.5	0.4	1	8.9	1.9	6
Total	100	100	100	100	100	100

Source: Srivastava and Srivastava, 2009.

3.4. Gender differences in education, training and child labour

Education and training are fundamental determinants of employment outcomes in any labour market. Generally, higher levels of educational attainment for males contribute to their greater capacity to access higher skilled and more rewarding employment opportunities in both the agricultural and non-agricultural sector. Gender differences in education levels between male and female workers in the Indian agricultural sector exemplify the situation in many rural developing regions, particularly in Africa, Asia and the Middle East (Srivastava and Srivastava, 2009).

Table II-5 shows that female farmers and agricultural workers lag behind their male counterparts at every level of educational attainment, and are between 20 and 30 percent more likely to be illiterate than males. Lower levels of educational attainment among women contribute to their being unable to compete with men for better and more skilled jobs. This underachievement in education can be explained with reference to three variables: gender differences in enrolment rates; gender differences in school performance at all levels; and gender differences in technical and vocational skills development (TVSD).

3.4.1. Gender differences in enrolment rates

Progress towards gender parity in primary and secondary education enrolment, as set out in the third Millennium Development Goal, has been steady, with many countries and regions approaching or having already achieved equality in enrolment rates. The majority of Latin American countries have already achieved the goal and although sub-Saharan Africa lags behind other regions, significant progress has been made in countries such as Botswana, Ghana and Rwanda, where gender disparities in terms of enrolment have almost been eliminated. However, globally, 55 percent of the out-of-school population are girls (UNESCO, 2007) and this figure is thought to be higher in rural regions, though reliable data are frequently unavailable. The 2007 UNICEF report on Pakistan gives a very illustrative example of that in the Balochistan province: 53 percent of the rural boys and 68 percent of the rural girls are not enrolled in primary school. A variety of factors explain lower levels of female school enrolment.

First, as ever, culture and social norms are paramount. In many rural societies, boys are valued more than girls, so parents are more willing to invest in boys' education

(Murray and Hurst, 2009). This effect is particularly strong for poor families who cannot afford to educate all their children (even in countries where school fees have been eliminated, indirect costs such as uniforms, books and transport make the price of education high) and tend to give precedence to sons over daughters.

Second, girls' greater (and frequently unpaid, unrecognized domestic) work burden in rural areas causes interruptions in their schooling and makes dropping-out more common for female students. Girls' work often includes economic and domestic labour, especially if their mothers are working. For example, in India:

"In addition to employment for wages, girls are invariably seen collecting firewood or fetching water for households in rural villages and participating in other domestic and non-domestic work, for example, engaged in cottage industry." (as cited in ILO, 2004)

Third, in rural villages, schools are often far away from the family home, hence lack of transport and boarding schools constrains school attendance. From a gender perspective, this can be particularly damaging for female school attendance given girls' greater vulnerability to sexual harassment and violence.

Fourth, the lack of consideration for female students' specific needs can lead to their having higher drop-out rates than their male peers. For example, an aspect as simple as failing to provide a separate toilet block for female students can lead to (particularly post-pubescent) girls dropping out of school.

3.4.2. Gender biases in school performances

In many rural societies, higher rates of female school enrolment have not been matched by higher levels of sensitivity to the specific needs and learning styles of female students. The scarcity of female teachers, traditional and gender insensitive teaching methods and course syllabi and unequal treatment of male and female students can lead to girls being at a disadvantage in terms of their ability to compete with boys in academic achievement. More specifically, attitudes within school which accord girls a lower status than boys, and gender biases in the allocation of school tasks, such as giving so-called high status tasks (for example ringing the bell) to boys and traditional female tasks to girls (for example cleaning the classroom floor), reinforce female students' low self-esteem and diminish their academic expectation of themselves in many areas. As well as contributing to higher female drop-out and lower enrolment rates, these factors can also influence the performance of those girls who remain in school as long as their male counterparts.

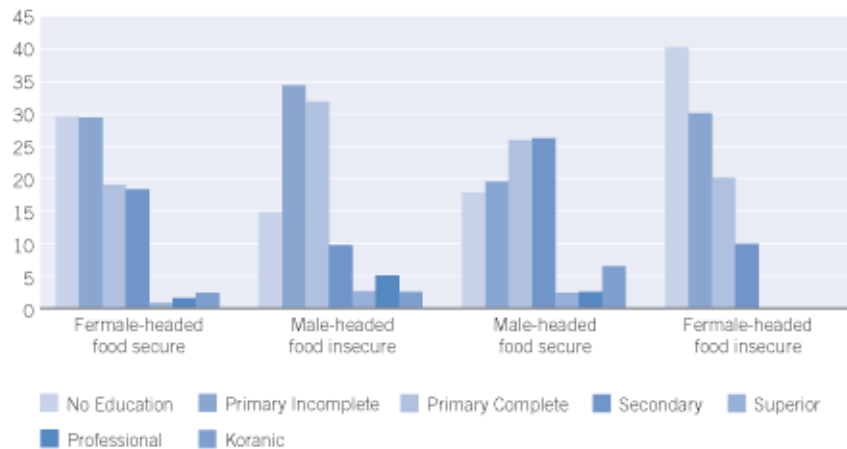
3.4.3. Gender biases in technical and vocational education and training (TVET) and skills development (TVSD)

Gender-appropriate technical and vocational education and training (TVET) and technical and vocational skills development (TVSD) are often neglected despite the considerable potential to improve rural women's economic opportunities. For the rural poor, the newer term TVSD is often used to describe the need for flexible skills, learning to learn, going beyond literacy and numeracy skills and including more than 'life skills' (King & Palmer 2006; McGrath 2005). TVSD comprises three main types of education or training: public school-based technical education, in the form of junior and senior secondary education but non-tertiary institutions; public vocational training centres and industrial training institutes; and training in the informal sector which often include traditional

GRAPH II-4

Cameroon levels of education by food security status

(percent)



Source: Gurkan and Sanogo, 2009.

apprenticeship training or traditional forms of training offered at artisan workshops owned by master craftsmen/women (King *et al.* 2007).

TVET and TVSD programmes have been underfunded as a result of the focus on basic and primary education as called for by the Millennium Development Goals. Furthermore, the lack of a gendered approach to TVET has seen women under-represented in formal training programmes and, where included, often directed towards typically female occupations (Hartl, 2009). As a consequence, female-headed households may be pushed into disadvantaged positions. The consequences of educational deficiencies were shown by several workshop papers to reach beyond the labour market, with food security, nutrition, health and fertility and mortality rates all adversely affected. Education and training of females, more than males, has been found to have a direct influence on these variables, making the issue of gender biases in education all the more critical from a development perspective. In the case of Cameroon (Gürkan and Sanogo, 2009), the lower the educational level of female household heads, the higher the probability of the household being food insecure (see Graph II-4).

The relationship was more ambiguous among male-headed households, with a significant portion of the male heads of food-insecure households having completed secondary school. Caution should be exercised in generalizing about cause and effect, particularly given the likely presence of other causal factors; however, this situation in Cameroon appears to support evidence on the costliness of failing to educate girls.

3.5. Migration

Migration carries significant implications for the women or men left behind in rural areas. In some countries, culture and social institutions dictate that migration is generally the domain of men, while women remain in the home to perform domestic and reproductive duties. While the general perception is that mostly men migrate, in 2009, female migrants constituted nearly 50 percent of the total international migrant stock. The burden on the women left behind is typified in Zimbabwe (Muza 2009), as explained by Alois, who has been an urban migrant worker in Zimbabwe for 37 years:

“Having my wife at our rural home is important in our Karanga culture. It has always been like this [...]. I can't change it now. My wife takes care of our home while I am working in the city. I come home whenever I can to check on them. She is so used to our home that she can't even visit me in the city for more than a week. She manages our fields and she knows exactly what is to be grown in all our fields each year”.

BOX II-6

The case of 27 villages in Southwest China (Guangxi, Yunan and Guizhou)

The major economic and social transformations taking place in China are changing the structure of agriculture and rural households. Subsistence farming is increasingly commercialized and most men and youth migrate out of agriculture.

A study in 27 villages in the three southwest provinces in 2008 revealed that during the last decade and a half, the total number of migrants in the 27 villages has doubled. However, fewer women than men have migrated, and migration by women is also more recent compared with men.

Data indicate that, on average, about 76 percent of all people actively engaged in agriculture throughout the year are women – this proportion is evident when spending time in the villages. One of the first things to notice is the virtual total absence of men in the fields, forests, on the paths and in the streets. The average age of the farming population (women and men combined) ranges from 45 to 50 years. The average age of the migrants is around 20 years younger than the farming population. Thus, married women and older people have become the main agricultural labourers throughout the year – a trend that seems to be increasing. In some cases, male migrants return home for short periods of time to help during harvest season.

The study also showed that there has been an overall increase of per capita annual income in all 27 villages. In most cases, incomes doubled and some even tripled between 1995 and 2007. Meanwhile, the income structure has changed significantly during the same period. The proportion of income from migration (remittances) has increased more than two times, representing 40-45 percent of household incomes. While both the crop and livestock income percentages have decreased as compared with 1995, they now account for about 30-40 percent of rural household income.

This male-dominant migration model in China is determined by two major factors. First, the traditional patrilineal ideology in society, the household, and even among women themselves maintains women's inferior status in terms of resources and allocation opportunities. Second, the current structure and status of rural households makes it very difficult for all members of a rural family to migrate because it is almost impossible to obtain a permanent residence permit in the cities. As a consequence, most of the male migrants become temporary labourers in cities. For them and for their farm households, land and agriculture remain as a kind of insurance and retreat.

While rural men and women have always worked in agriculture, traditionally the men's role was predominant since women were also engaged in domestic work. However, the new social context is transforming the intra-household gender division of labour, i.e. from “the men till and the women weave” to “the women till and the men work in industry”. This involves an expansion of the traditional model of the gender division of labour in China, i.e., “men control the outside world, women the inner”. Women's “inner world” thus has expanded to include agriculture, which is considered an inferior profession with lower cash returns, although it also provides a valuable retreat and insurance for rural households in this transition period.

One important consequence is that the externalization of costs during the transition is being borne by women, who remain in farming. Most married middle-aged and old women are still engaged in subsistence farming on small plots to meet their families' food needs and contribute to national food security, both of which are still heavily dependent on the efforts of small farmers.

Although women play crucial roles in food security and poverty reduction, they face great difficulties in accessing technology, credit and markets because of their limited human and social capital and insufficient external support. Current policies, particularly land tenure and gender insensitive government support services (e.g. extension and credit) have undermined women's contribution to agriculture and food production as well as their employment in and benefit from economic growth.

Source: Song, 2009.

This tendency seems reasonably consistent in Africa and Asia, with men forming the overwhelming majority of migrant workers. For example in China (Song, 2009), rising urbanization and increasing out-migration of younger economically active men, are leading to the feminization and ageing of the agricultural workforce (see Box II-6).

Though these tendencies are reasonably representative of the situation in many parts of Asia, Africa and Latin America, migration trends, either within these regions or globally, are by no means uniform. In Vietnam, for example, there has been a marked increase in the female share of overseas migration, rising from 28 percent in 1992 to 54 percent in 2004 (Thin, 2009). While there are country-specific variations in migration, the overall dominance of men in rural to urban migration has impacted on women's employment and welfare in a variety of ways (see Section 4.2).

3.6. Lack of advocacy power and voice

Factors that contribute to autonomy and negotiating power within the family include education, an independent income, new responsibilities due to the migration of a spouse, personal inheritance assets and participation in community decision-making processes. Rural organizations that mobilize and represent women are also essential to create awareness around rights and give women greater voice and bargaining power relative to both their employers and family members (see "the importance of collective capacity" in Box II-7).

Farmers' organizations, when they exist, are usually dominated by men; women are under-represented or not represented at all, particularly at the leadership level. To be legitimate and to have a real voice in a male-dominated society, women need to be strongly represented and recognized in national and local mixed farmers' organizations. When women cannot express their voice within a group composed of men and women (despite recognized membership or in contexts where women have little or no experience

BOX II-7

The importance of collective capacity

A distinction can be made between "organizing women" and "women organizing." "Organizing women" is imposed (and may be still, by the end, very empowering), in opposition to a process owned by women themselves since the very beginning (women organizing). Therefore, the individual-, organizational- and network-level of capacity development must speak to "women organizing", not "organizing women." Gender inequality not only erodes opportunities and benefits associated with socio-economic development, but also deepens structural vulnerabilities and conflicts in society.

The need to organize or take action as a group arises from the experiences of women who are oppressed. These lived experiences create action and provide a reason for organizing. They are closely tied to the self-concept at the individual level of capacity development. This means that women should analyse and have a sense of self (e.g. self-worth and self-determination) to understand and emphasize individual "self" (autonomy, awareness, human agency) before they can use their voice and realize collective power or social agency. The importance of the individual is referred to as the self concept in interpersonal communication and the links between individual, organizational and systemic change are crucial to capacity development.

Personal change is a necessary step for collective and institutional change (i.e. changes in the way people collectively think, behave and organize themselves for interaction with others). Capacity-development activities accompany and strengthen all of the above by taking the form of learning through action and reflection.

Source: Hambly and Sarapura, 2009.

BOX II-8**One approach to empowering communities: the Self-Employed Women's Association (SEWA), India**

SEWA is a trade union of poor, self-employed women workers who earn a living through their own labour or small businesses. Such workers do not obtain regular salaried employment with welfare benefits like workers in the organized sector. Of the female labour force in India, more than 94 percent are in the unorganized sector. However, their work is not recorded in the official statistics and hence remains invisible. SEWA's approach to empowering communities is as follows:

Involve rather than intervene

- Given years of underdevelopment, poor rural women need to develop confidence before initiating any process of change. A 'project' or 'mission' should not start with a blueprint; rather the blueprint evolves with the participation of members in specific areas.
- SEWA's major success has been because of the role played by its grassroots leaders known as Aagewaans, who are instrumental in involving the local communities, winning their trust and confidence and taking decisions that are locally relevant.

Coordinate attempts from different sister organizations/units

- Livelihood finance is not an activity that can be implemented by a single unit or organization with a specific expertise. It is an ongoing process that involves well-coordinated approaches from various quarters, with the poor placed in the centre.
- It is critical that government agencies, which need to work with various other government departments, ensure a well-coordinated approach.

Develop community support systems (health care, child care and education)

- These activities contribute to 'indirect' savings of income (fewer expenses on medication, etc.) and act as support systems in adverse times.
- Often, such activities are the entry point to involve local communities in a new area and to understand their related problems better.

Identify and develop skills

- SEWA has usually focused on developing traditional skills and activities, thereby equipping the local communities for livelihood generation in contemporary markets. Fostering new skills and building them to a marketable level is a very costly process.
- Training of communities to build their capacities in alternative livelihood activities and skills is equally important because this gives them the flexibility to choose between different means of livelihood.

Build capacities before providing market services

- Align activities with modern trends and developments in the outside market and world. The development of new skills in different fields will bear no fruit if no market exists for them.
- Inculcate planning and managerial skills to build self-sustaining systems. Local communities must be able to take care of themselves after initial "hand holding".

Provide financial services

- Provide financial security (e.g. credit, banking and insurance).
- Provide access to credit, investments and working capital.

Build linkages

- Market linkages (backward and forward) to save communities from being trapped by middlemen and to put in place a system to earn livelihood.
- Institutionalize the linkages. Build infrastructure and organizations to take care of the market linkages and other systems built over time.

Source: Nanavaty, 2009.

in public speaking or working in groups), it can be more efficient for women to set up and run their own separate organizations, in which they can develop and practise some basic skills in a more familiar, more comfortable or culturally appropriate setting. A good example is provided by the SEWA case, described in Box II-8.

The importance of collective action is also highlighted in the study on gendered employment in the fisheries and aquaculture sector in Asia and the Pacific (Weeratunge and Snyder, 2009). For example, women participate in community-based fisheries committees in Cambodia in order to improve their livelihoods, enhance their capabilities (i.e. skills, knowledge and self-confidence) and promote sustainability in fisheries resources for the next generation. While women are active in the savings and credit programme and self-help groups, only a minority assume leadership positions in these committees. Their roles in savings and credit groups are socially sanctioned by traditional gender norms that associate women with financial management of the household, as well as patience and negotiation skills to collect dues from group members. Women identify as their immediate capacity-building needs, improving skills (especially related to overcoming illiteracy), upgrading well-being and improving health care, and gender equity (building support from men and sharing tasks). They consistently cite the difficulty in balancing productive (income generating) with reproductive (housework) tasks, based on gender-restrictive social norms, as the main constraint to improving their livelihoods and participating in community-based management.

The situation with respect to cooperatives in conflict settings in Arab states is also instructive (see Box II-9). Esim and Omeira (2009) highlight the potential of cooperatives to promote women's access, agency and voice. Sharing risk, pooling resources, learning together, generating income and balancing work and family responsibilities can offer new opportunities to women and can promote their empowerment. However, gender-mixed cooperatives have often been unsuccessful in incorporating women into leadership roles, with management positions frequently taken up by the wives of male leaders. In

BOX II-9

Donor support to cooperatives in Lebanon

As cited in Esim and Omeira (2009), in the words of Rami Zurayk (2007) recounting the experience in Lebanon: *[A] co-op is often a precondition for accessing development aid by small farmers. Driven by our donors' agendas, we development workers coerce poor farmers into creating a cooperative, and they usually passively obey. Once we stop injecting it with funds, the cooperative dissolves and fades away. Of course, there are some successes, the exception is necessary to prove the rule. But out of the hundreds of cooperatives that were created in the past 10 years, only a few are still functioning.*

The support of donor agencies in promoting rural women's employment similarly has had mixed blessings. When donors identified gender equality as an entry point for rural development, they focused on applying their own models of gender integration in institutions whether this was about establishing women-only cooperatives or encouraging women leadership in mixed cooperatives. One common experience in the post-Beijing era has been of international donor agencies encouraging governments to create women's departments in line ministries along with national women machineries at centralized government levels. These women departments have often become isolated islands of expertise, with resources and knowledge generated staying at a level that hardly trickles down. Many rural women units in agricultural ministries became equipped with well-trained staff with little connection to the other departments of the ministries nor rural women themselves, except for a few pilot studies and projects here and there in Lebanon.

Source: Esim and Omeira, 2009.

addition, women-only cooperatives sometimes suffer from their exclusion of men, which can result in resistance to their initiatives and impede changes in existing gender relations in society. Sometimes women-only cooperatives, when focussing on traditional activities such as sewing and weaving, merely reinforce established gender roles. Finally, donor-led processes that push women to become organized in a certain predetermined configuration (in this case, cooperatives) can sometimes lead to “artificial” structures with weak foundations and high risks of dissolution when the external support stops.

To conclude, the importance of women contributing to collective actions through membership in producers’ organizations in rural areas has been unanimously recognized as a powerful tool for women’s economic and political empowerment, as it increases female participation in community decision-making processes. When freely and independently established, with equal voice given to men and women, and programmes based on very focused objectives taking into account gender specificities, these organizations can achieve successful results in terms of poverty reduction, economic development, empowerment of small and poorer producers (of whom most are women) and gender equality.

3.7. Differing female preferences are often ignored in market-led approaches to poverty alleviation

Research by Anderson *et al.* in rural Vietnam (2009) finds that women are typically more risk averse than men. Women were found to be less willing to compete than men, to underestimate their chances of success and to generally prefer low-risk/low-return outcomes when compared with men. This trend was particularly pronounced among the poorer segments of rural communities. It is not known whether these preferences are innate or the result of social factors, but their existence has implications for rural employment outcomes.

Such female preferences for low-risk activities may be partly responsible for lucrative and risky rural income-generating activities being dominated by men. Further, past policies aimed at reducing the gender-differentiated constraints that individuals face may have been inhibited by their failure to take gender preferences into account. Attempts to mainstream women into markets and other institutions which have evolved in line with male preferences may suffer if this issue is not taken into account.

4. Current issues and trends

It is important to analyse gender and rural employment within a more comprehensive socio-economic context, considering current issues and trends in the global economy and their bearing on men and women’s performance in rural labour markets.

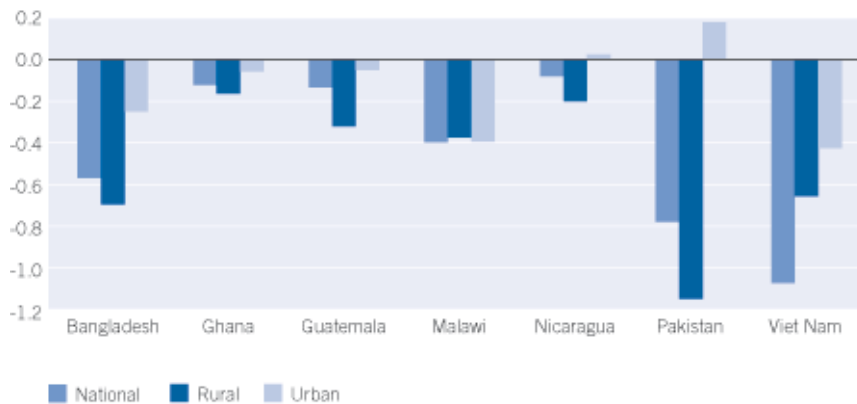
4.1. The financial and food crises

The recent financial and food crises have slowed down the progress towards greater gender equity that has been made in past years: poverty levels around the world are worsening, and the number of people who are unemployed, have a precarious job and are among the working poor, is increasing. Women are frequently among the first to lose their jobs, since they are often seen as a flexible buffer workforce who can be drawn into the labour force during labour market upturns and expelled in downturns. With job losses and cuts in spending on social services and infrastructure, women’s care burdens and unpaid work

GRAPH II-5

According to the Food and Agriculture Organization of the United Nations, food crisis hits female-headed households harder (2008-2009)

(percent)



Source: FAO -SOFI 2009.

have intensified, and their financial contribution to household food security is likely to decrease. This is particularly dramatic for female-headed households.

Graph II-5 plots the relative welfare change of female-headed households (FHHs) compared with male-headed households (MHHs) as a result of the food crises. Clearly, in rural areas the burden has been disproportionately borne by FHHs.

One of the main reasons that women are generally more affected by economic crises is their overrepresentation in vulnerable forms of employment. Table II-6 shows that in the world generally and in the poorest regions in particular, female workers have a significantly higher probability than male workers of being involved in vulnerable forms of employment.¹⁸

Table II-6 shows that men and women are engaged in vulnerable employment in similar proportions worldwide, but the gender disparities in sub-Saharan Africa and South Asia are much more pronounced. In those regions, where the working poor represent the

TABLE II-6

Male and female proportions of vulnerable employment

	Agricultural employment (share of total employment (%))	Working poor (US\$2 per day) (share of total employment(%))	Vulnerable employment (share of total employment (%))		
			Total	Males	Females
World	34.4	40.6	50.6	49.1	52.7
Sub-Saharan Africa	62.5	82.0	77.4	72.0	84.4
South Asia	48.2	80.9	77.5	74.3	85.1
East Asia	38.6	33.0	55.5	50.8	61.0

Source: elaborated from ILO Global Employment Trends 2009 (data 2007).

¹⁸ Vulnerable employment is defined as persons who are less likely to have formal work arrangements or access to benefits or social protection programmes, and are therefore more exposed to economic fluctuations (ILO, 2008).

majority of the working population (over 80 percent), about 85 percent of women have vulnerable jobs, while only 75 percent of men face a same situation.

The particular vulnerability of women in employment demands that a gender lens be used when developing policy responses. Yet, although women are more likely to be vulnerable than men, many men are also vulnerable (Gurkan and Sonogo, 2009). A focus is therefore needed on women, but not at the expense of the needs of vulnerable and poor men.

4.2. Migration and feminization of rural activities

As indicated in Section 3.5, migration influences rural employment opportunities positively or negatively, and is closely linked to the world economy. Rural-rural, rural-urban and international migration affects household welfare and women's roles in rural communities in various ways:

- In some regions, male migration has been largely responsible for the feminization of agriculture. In China, for example, high levels of male migration have increased the female proportion of the agricultural labour force up to 78 percent (Song, 2009).
- Paris *et al.* (2009) find that in the Philippines, Thailand and Vietnam, male migration leads to an increase in women's empowerment, as women take on greater management and decision-making responsibilities in the absence of their husbands (see the full paper in Chapter 3).
- The same authors found that migration caused women's workload to increase in some countries (e.g. Vietnam), but remain unchanged in others (e.g. the Philippines and Thailand) as women used remittances to hire labour to take on the increased work burden arising from male migration.

TABLE II-7

Share of different sources of income and household income per year
(percent)

Source of income	Thailand		Vietnam		The Philippines	
	WM	NM	WM	NM	WM	NM
	(n=268)	(n=295)	(n=304)	(n=346)	(n=321)	(n=349)
Remittances from migrant workers	38		36		59	
Cash income from rice	12	19	37	49	17	36
Cash income from other crops	16	21	2	1	a	
Off-farm	4	8	2	4	2	2
Non-farm	21	45	10	25	20	57
Capital gains from land and non-land assets	1	1	a	a		a
Sale from livestock	8	6	13	21	2	5
Total	100	100	100	100	100	100
Annual household income (USD)	2 541	1 842	1 411	1 306	2 857	1 512

WM: with migrant; NM: no migrant; a: less than 1%.

Source: Paris et al, 2009.

- Remittances from migrant workers increase family income. Table II-7 (Paris *et al.*, 2009) confirms that in the Philippines, Thailand and Vietnam, households with migrants tend to have higher incomes than those without.

The effect of migration on female welfare is, however, more ambiguous:

- In Mexico, for example (Appendini, 2009), some (particularly young) women reported the lack of help with decision-making and raising their children to be problems, while other (particularly older) women enjoyed their greater freedom and autonomy resulting from their husband's migration.
- In Vietnam (Thin, 2009), social problems such as family break-ups owing to marital infidelity and increased alcohol use were identified as negative effects of migration.
- Paris *et al.* (2009) reports increased female empowerment resulting from male migration in the Philippines, Thailand and Vietnam. However, women left behind often complained of suffering from loneliness, depression, insecurity and difficulty in disciplining their sons. Indeed, it is reported that many women broke down in tears when talking about their troubles from the absence of their migrant husbands.
- In Ukraine, Tolstokorova (2009) reports the feminization of migration over the past ten years, with women migrating to Western Europe in the relatively well-paid care economy, while men find less profitable seasonal employment in agriculture or in construction (in Russia, Poland, Portugal and Spain). This outflow of women from rural villages induces family, social and behavioural changes which can be dramatic for the members of the rural household left behind.

The effects of migration are by no means uniform throughout diverse regions of the world. However, several overarching conclusions can be drawn. Clearly, migration generally improves household welfare through its positive effect on total household income. Female empowerment has also been found to be a benefit of male migration, though it can't be assumed that this is always the case, nor that the welfare of women left behind by migrating husbands is always enhanced. Welfare impairing impacts from migration include the incidence of depression, loneliness and lack of support in controlling household affairs reported by some women left behind. Additionally, social problems have been observed to arise within households and communities, both in the cases of women being left behind by their migrating husbands and vice versa.

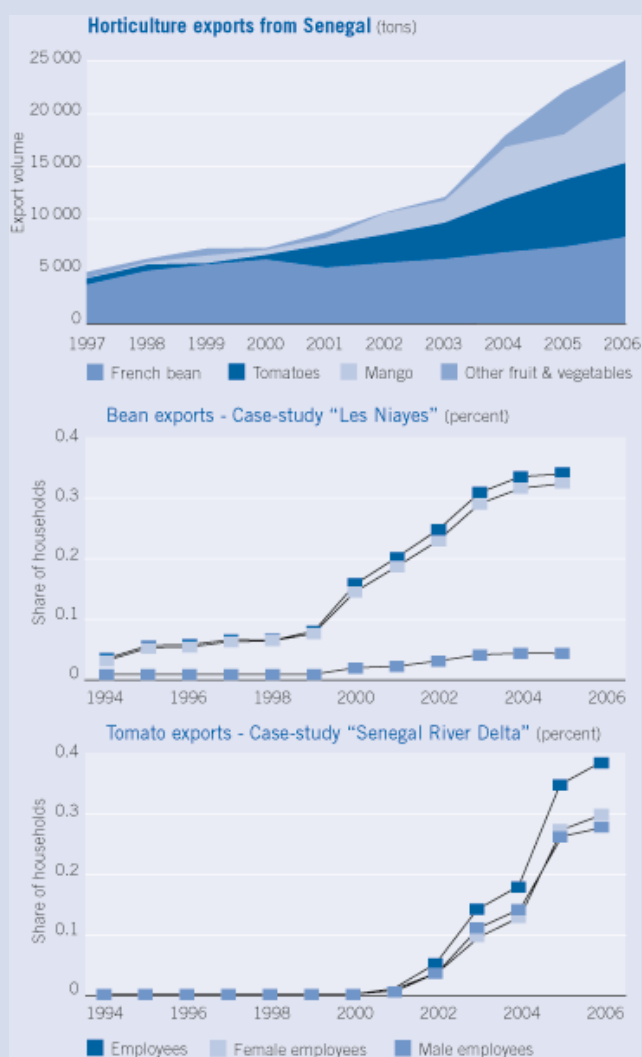
4.3. International trade and diversification of the rural economy

As global employment in agriculture has declined throughout the world (from 40.8 percent of the total active population in 1998 to 33.5 percent in 2008 according to ILO),¹⁹ corporate farming has emerged as an important source of employment for rural women (especially in Latin America). However, evidence of gender disparities in working conditions (i.e. labour standards) and pay in these new sectors is mixed. Those remaining "outside" as smallholders (many of whom are women), often stagnate and face hardship. The study in Box II-10 on commercial farming in Senegal (Maertens and Swinnen, 2009) is quite illustrative. While men dominate in high-value smallholder contract farming, women benefit more and more directly from wage labour in large-scale estate production and agro-industrial processing.

19 Source: ILO http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_101461.pdf Table A6 page 31.

BOX II-10

Horticulture exports from Senegal

**Gender effects of export-oriented agro-industries:**

- Increased employment in surrounding areas
- Employment of a large share of female workers
- Significant increase in female-earned income in the households
- No evidence of gender discrimination in these labour markets

Rural income and poverty effects of contract farming and agro-industrial employment:

- Both better-off and poorer households benefit; the former through contract farming and the latter through employment in the agro-industry
- Contracted farmers have incomes that are 110 percent higher than average income in the region, and agro-industrial employees have incomes that are 60 percent higher
- Poverty is reduced by 12 percent, mainly through employment generation in agro-industries

Source: M. Maertens and J. Swinnen, 2009.

The diversification of the rural economy (e.g. in Latin America) has created rural non-agricultural employment pathways out of rural poverty. But these new job opportunities do not necessarily generate greater gender equality, since women generally engage in the lowest paid and most vulnerable forms of work, such as domestic services. For example, in Brazil, the pay of domestic workers remains below the agricultural wage rate (Figueiredo and Branchi 2009). Generating more jobs in rural areas does not necessarily mean that they are better jobs.

The development of value chains can stimulate national governments to promulgate and implement sound labour legislation for the agricultural sector, and enforce ethical standards, codes of conduct and decent work provisions in agro-industries. In addition, training and educational programmes are needed to provide opportunities for female employees and employers to learn, discuss and take action on labour standards and employment rights. As described in Box II-11, this could contribute to ensuring enforcement and monitoring of labour laws and codes of conduct in agriculture, including for temporary workers (i.e. seasonal or casual jobs).

BOX II-11**Kenya flower project (Ethical Training Initiative)**

The Kenyan cut flower industry has grown rapidly in recent years and now provides a vital income for up to two million people (55 000 Kenyans, mainly young women, are directly employed in the industry). It relies on a large supply of cheap labour, and requires limited skills in grading, packing, harvesting, tending beds and watering. Many of the workers are women who are poor and vulnerable to exploitation.

In 2002, the Ethical Training Initiative (ETI) and its members were alerted to serious violations of labour rights and of the ETI Base Code in the Kenyan flower industry: low pay, poor health and safety (particularly in pesticide handling), poor housing, excessive overtime, abusive supervisors, sexual harassment and barriers to freedom of association. Action taken by members in response to the allegations helped establish productive dialogue in both Kenya and the United Kingdom, which imports one-third of all flowers exported from Kenya. A group of ETI members visited Kenya to meet workers and talk to other players in the flower industry.

The visit helped build platforms for ongoing dialogue, including between agricultural worker unions and industry bodies. Kenyan stakeholders – including NGOs, government and industry – formed the Horticultural Ethical Business Initiative (HEBI), the aim of which was to work together to tackle flower workers' conditions. ETI members encouraged their suppliers to take part in dialogue in Kenya through HEBI and industry bodies.

While there is still work to be done, changes to the audit process and in the purchasing practices of ETI members have led to a number of improvements for workers in Kenya, including the following: more permanent contracts, establishment of worker welfare and gender committees, better provision of protective equipment, stricter pesticide controls and extensive improvements in housing. More women now have access to day care facilities and there is general acceptance that pregnant women should have light duties.

Although work initially focused on Kenya, ETI members that source flowers have been applying these lessons to other areas of their supply chain. In April 2007, ETI brought Colombian flower exporters, trade unions and companies sourcing from Colombia to the discussion table for the first time. All parties agreed to establish the first-ever multi-stakeholder forum for addressing workers' rights in the floriculture industry. This was a major achievement in terms of constructive debate between companies and trade unions on labour rights.

Source: ETI, 2009. <http://www.ethicaltrade.org/in-action/projects/kenya-flower-project>.

4.4. Child labour

Among the trends and issues related to gender and rural employment, child labour is a topic that is receiving growing attention. Child labour undermines decent employment for rural youth since it preconditions working children to accept informal and precarious work when they reach adulthood. Poor health and safety, unenforced legislation, high drop-out rates of child workers and low school attendance and performance limit the opportunities for children involved in work to improve their prospects when they become adults.

Child labour is particularly prevalent in rural areas, especially in the agricultural sector. The ILO Global Report on Child Labour (2010) revealed that out of the 215 million child labourers around the world, 60 percent work in agriculture (129 million between 5 and 14 years of age). In this sector, regulations on child labour can be easily ignored, particularly for farming and rural employment systems which are far from labour inspectors and plagued by poverty and subsistence-oriented livelihood strategies. Work on family farms is often excluded from legislation. In addition, as the study on rural child labour in Africa (de Lange, 2009) points out, the relationship between household wealth and child labour is complex in rural Africa. Research mentioned by A. de Lange indicates that ownership of land or livestock can even increase (rather than reduce) the number of hours that children spend on household work, because their labour is used to make these assets productive.

Despite a lack of sound sex-disaggregated data on child labour in agriculture, there is growing awareness that this issue should be tackled with a differentiated approach for boys and girls. The set of circumstances leading to them being involved in work are by no means homogenous, nor are the conditions and nature of the work itself. Despite the invisibility of some types of work that girls do, efforts are being made to research and document it. Moreover, ‘non-economic’ work (i.e. different types of household tasks undertaken by girls and boys) is recognized as an important aspect of child labour, and an area in which girls are engaged for longer hours than boys. Finally, girls face additional risks of exploitation and sexual abuse that are often underestimated and may not be appropriately addressed in the strategies to eliminate hazardous child labour.

Rural boy labourers suffer from the hazardous nature of their work and from a higher probability than girls of being involved in economic activities. Hazardous child labour is defined as work which, by nature or circumstances, is likely to harm the health, safety, morals and/or development of the child. According to ILO, working girls and boys face different types of hazards based on the different types of work in which they engage (ILO-IPEC 2006b). In the Ghanaian cocoa sector, in addition to working without appropriate protective equipment, boys are more likely than girls to be involved in hazardous activities such as spraying pesticides (de Lange, 2009).

The situation for girls in agriculture seems to vary according to the cultural, religious and ethnic traditions of the country (Murray and Hurst, 2009).²⁰ In some cases, they seem to be discriminated against from the earliest stages of life, throughout their childhood and into adulthood. However, the precise magnitude of this discrimination is difficult to estimate since girls’ work in agriculture (like that of female adults) is often invisible, and their contribution to domestic work (that comes on top of agricultural work) is not given any specific economic value nor recognized as work.

Murray and Hurst (2009) conclude that, “differentiated sensitization messages need to be put in place for rural girls and boys because of the significant impacts of family situations, tradition and gender roles. Statements and guidance from intergovernmental development bodies suggest that integrated mainstreaming-type approaches for combating child labour are required”.

5. What are the policy options?²¹

5.1. General conclusions

5.1.1. The need for a package of policy options and policy evaluation

As seen in the previous sections, gender is a key determinant of the degree of access to productive resources, but also the basis for the division of labour within the household, bargaining power and the social value attributed to different types of work. This makes it a key determinant of decent work outcomes. Although gender inequality varies considerably across regions and sectors, there is evidence that, globally, women benefit less from

²⁰ More information on girls and the difficulties in the transition to decent work for young women can be found on <http://www.ilo.org/ipecinfo/product/viewProduct.do?productId=10291> and more updated data on child labour can be found in the ILO Global Report on Child Labour 2010 http://www.ilo.org/global/About_the_ILO/Media_and_public_information/I-News/lang--en/WCMS_125263/index.htm.

²¹ The policy options listed here are a result of workshop discussions and do not necessarily reflect the official policy viewpoints of the three UN agencies hosting the event.

rural employment, whether in self- or wage-employment, than men do. Women face inequalities in all the pillars of decent work: standards and rights at work, employment creation/enterprise development, social protection and social dialogue (see Box II-14).

Since the reasons for gender differences in rural employment are many, and are often intertwined, effective policies need to be designed as a package of mutually reinforcing measures. As the India study (Srivastava and Srivastava, 2009) made clear, higher work participation does not lead to better employment outcomes unless accompanied by higher education and better access to assets. Pathways out of poverty vary for rural women and men, depending on socio-economic and institutional settings. A different policy mix will be required in each country to generate decent jobs and facilitate women's and men's equal access to them. Policies must give consideration to women's limited bargaining position, both within the household and in the labour market, as poverty is linked to weaker incorporation in both.

Women farmers and workers in developing countries benefit more from “package systems” (including policies and concrete measures) that focus on capacity development rather than on capacity building. This means a broader approach and a longer-term engagement are required, including training not only on technical skills or financial management, but also on the development of human and social capital, organizations and institutions, and on the creation of a propitious and enabling environment that includes laws and policies to ensure gender equality in access to property, finance, education, work opportunities and wage rates (see case of Sri Lanka in Box II-12).

Monitoring the effectiveness of existing policies and projects from a gender perspective must take into account distinct gender contexts (Sancar and Bieri, 2009). These contexts may include: the time women have left for recreation; the shift of responsibility to maintain the household economy; decision-making processes; wage gaps; and the production and reproduction of gender norms. Failure to take account of such realities often leads to inadequate monitoring of qualitative change with respect to gender roles and outcomes.

BOX II-12

Multiple pathways and policies towards gender equity in Sri Lanka

There is a need to introduce “policy packages” that include capacity-building measures, financing, credit and social capacity building. The contents of the package should be determined in relation to the existing situation, in order to address the issues and conditions that impede women from achieving the goal of equity. Rather than targeting issues or problems in isolation, policies should address multiple pathways for reducing poverty and the gender gaps in agrarian economies. To reduce the gender gaps which have been inculcated as a result of social construction, policy initiatives should be strategically designed, in partnership with the private sector.

Policies for agricultural commercial development need to be designed to eradicate technological, social and financial obstacles to gender equity. Capacity building of women is effective when women work through their social organizations. They work as centres of change, facilitating agricultural commercialization through transformative action. In this regard, a gender-inclusive policy framework with tailored extension/mobilization mechanisms should be introduced. Policies should be formulated to mainstream gender into agriculture and to open multiple pathways of upward mobility for women.

Source: Wickramasinghe, 2009.

5.1.2. The need for more and better sex-disaggregated data

The paucity of sex-disaggregated data needs to be acknowledged and seriously addressed as a starting point for better systems, diagnoses and more effective policy design. Quantitative data, trends, examples of good practices and innovative policies, as well as solid evidence of the different experiences and needs of rural women and men, are needed to better guide policy development. Such knowledge and information can help convince policy-makers, who often have scarce resources, to prioritize gender-sensitive investment in rural communities and develop sustainable, gender-equitable rural employment strategies.

Research based on sound sex-disaggregated data and analysis, to better understand gendered dynamics in rural employment, is a prerequisite for effective policy design.

As demonstrated in the studies on the Gaza Strip, Iraq, Lebanon (Esim and Omeira, 2009) and Ukraine (Tolstokorova, 2009), there are often no reliable national databases of gender-sensitive statistics on agricultural development and no proven methodology for their collection, analysis and interpretation. Data on the full range of assets and bundles of rights held by individual men and women are needed to understand the interaction among the various assets held by household members and differential outcomes. This additional data would strengthen both project design and evaluation. In terms of analysis, there is a need for:

- mezzo and micro-level analytical studies on how rural employment is gendered and embedded in wider social, cultural, economic, political and ecological structures and processes (with domestic labour as a key variable);
- global, regional and national reviews on current policies that maintain or exacerbate gender disparities in rural employment and policy reform to bring about gender-equitable outcomes.

BOX II-13

Increasing knowledge of asset inequality

An important first step in increasing knowledge about asset inequality by gender would be for data on individual and joint ownership of land and housing to be collected in national censuses. The incidence of asset ownership by gender would provide a needed baseline indicator of gender inequality across countries. It would be relatively easy for existing multi-purpose surveys to add a minimal set of questions regarding individual and joint ownership of a broad range of specific assets as well as questions regarding how these assets were acquired and who made decisions regarding their use. Systematically collecting such data in surveys would greatly enhance gender analysis of the processes through which assets are acquired, utilized and sustained.

More specific data are needed to understand gender-differentiated access to and ownership of productive assets and the relationships with rural employment. Data on the full range of assets and bundles of rights held by individuals are needed to understand the interactions among the various assets held by household members and differential outcomes. These additional data would strengthen both project design and evaluation. With additional information, it is less likely that projects will backfire and worsen, rather than improve, women's employment opportunities and well-being. Recognition that women have insecure land rights in a region, for example, would mean that an intervention would need to secure these land rights before attempting to increase agricultural productivity, in order to avoid increasing the possibility that women will lose rights to the land.

Collecting these data is key to developing programmes that take into account the role that assets play in moving people out of poverty and how this differs for men and women.

Source: Doss *et al.*, 2009.

5.2. Policy recommendations classified under the four pillars of decent work

While acknowledging women's vulnerability in the rural labour market, new policy approaches are needed to explicitly address gender inequalities in the framework of the four pillars of the Decent Work Agenda (see definition in Box II-14). During the workshop's interactive sessions, in which in-depth discussions took place between the authors and other participants, a number of policy options were presented and debated as ways of improving women's employment outcomes and thus gender equality. They are presented in the pages that follow, structured around the four pillars of the Decent Work Agenda.

5.2.1. Fundamental rights

Decent work respects a person's fundamental rights at work, which include freedom of association and the right to collective bargaining. Forced or compulsory labour should be eradicated, child labour abolished and discrimination in respect of employment and occupation eliminated. These rights, which were adopted in 1998 in the ILO Declaration on Fundamental Principles and Rights at Work, are regarded as human rights and employees' rights. They are universal and apply at all times in all situations.

Ensuring productive and decent work for rural workers is crucial if they are to escape from poverty and have the means to produce or purchase adequate and nutritious food. However, efforts to reduce poverty and hunger by raising on- and off-farm incomes and

BOX II-14

Definition of decent work

What is decent work?

Decent work sums up the aspirations of people in their working lives – their aspirations for opportunity and income; rights, voice and recognition; family stability and personal development; and fairness and gender equality. Ultimately these various dimensions of decent work underpin peace in communities and society.

Decent work is captured in four strategic objectives: fundamental principles and rights at work and international labour standards; employment and income opportunities; social protection and social security; and social dialogue. These objectives hold for all workers, women and men, in both formal and informal economies; in wage employment or working on their own account; in the fields, factories and offices; in their home or in the community.

Decent work is central to efforts to reduce poverty and is a means for achieving equitable, inclusive and sustainable development.

Source: ILO – http://www.ilo.org/global/About_the_ILO/Mainpillars/WhatisDecentWork.

Decent work and gender issues

Decent work applies to all workers: both women and men benefit from more “decent” jobs and income. Decent work can only be assured in a society that allows labour markets to provide equal opportunities and equitable incomes to various social groups regardless of various personal, biological, social or political attributes. In all countries, however, social barriers and discrimination persist to varying degrees because of prevailing social institutions and norms that are often slow to change. More specifically, with respect to gender-based discrimination, despite substantial progress made in promoting gender equality and narrowing gender gaps in the labour market during the last century, much of women's work remains in traditionally “feminine” occupations. These are often more precarious and receive less pay than men's occupations across the world. Women continue to dominate care work, which is generally poorly remunerated or unpaid.

Source : ILO Turin, 2001. Naoko Otobe, *Gender equality and poverty alleviation*.

diversifying livelihoods can be hindered by emerging forms of employment relationships based on more flexible and casual types of agricultural work. Dramatic changes are taking place in agricultural systems worldwide. The expansion of value chains associated with agribusiness and agro-industry, the difficulty of self-employed small farmers to earn a living wage, and labour shortages in some regions together with underemployment in others, are transforming rural labour systems. Achieving fairer conditions of employment means providing opportunities for productive work that deliver a fair income; workplace security and social protection for workers and their families; better prospects for social integration and personal development; equality of opportunities and treatment for all women and men; and freedom for people to express their concerns, organize and participate in the decisions that affect their lives.

Three specific dimensions of the fundamental rights at work were discussed in the workshop and suggest a set of policy recommendations:

1. Support ratification of international conventions, educate women on their employment rights and enable local organizations to participate in monitoring codes of conduct related to labour standards. Within rural areas, the following are particularly important:
 - Encourage national governments to ratify ILO conventions relevant to female agricultural workers, and implement international labour standards. Recently, legislators in some countries have begun to pay greater attention to gender aspects of labour relevant to agriculture. For example, in South Africa, women farm workers had very little protection until 1993, when the legislation on minimum labour standards was extended to agricultural workers. In 1998, the Employment Equity Act started to prohibit unfair discrimination on grounds of gender, sex, pregnancy, marital status and family responsibility.
 - Motivate governments to promulgate and implement sound labour legislation, including the right to collective bargaining and freedom of association for the agricultural sector, and to enforce ethical standards, codes of conduct and decent work provisions in agro-industries. The elaboration and adoption of codes of conduct should cover employment conditions of southern producers exporting to European markets. Since the 1990s, over 200 codes related to worker welfare have been developed, of which only 20 apply to agriculture in developing countries; most of these have resulted from the development of agricultural value chains, though they are not yet very convincing in terms of gender sensitivity (Barrientos, Dolan and Tallontire, 2001, as cited in Maertens and Swinnen).
 - Involve civil society and governments in awareness raising and educating women on labour conditions and employment rights, without forgetting to provide continuing communication and accessible means to fight for these rights.
 - Raise awareness through public advocacy, denouncing gender inequities and labour conditions that violate existing standards.
 - Organize training and educational programmes using appropriate and available information and communication technologies to disseminate information on employment rights, labour standards and social clauses.
 - Enforce and monitor labour laws and codes of conduct in agriculture, including for temporary workers (i.e. seasonal or casual jobs).
 - Increase women's access to reliable and affordable legal advice so that they can easily and freely benefit from assistance in case of litigation.

2. Create partnerships between governments, local organizations and the private sector to enhance the implementation of labour standards in rural areas:

- Expand occupational health and safety measures for informal agricultural and agro-industrial workers, in partnership with producer and worker organizations and the private sector.
- Encourage local organizations to participate in monitoring and auditing labour standards and the social aspects of codes of conducts (e.g. flower industry in Kenya).
- Promote the role of women as leaders and members of institutions that govern women's labour rights, from the fields (with women's unions and organizations) to the highest levels of the legislative bodies (Ministries and Parliaments).

3. Governments should enhance gender equality in rural employment through the following:

- Provide core public goods (including rural infrastructure), improve the investment climate, regulate natural resource management, enforce labour standards and promote social and gender equity.
 - Upgrade rural infrastructure, especially with regard to water, transport and markets (including market spaces reserved and equipped for women with children). Employment-intensive public works are a key means of both upgrading rural infrastructure and providing employment. Special efforts should be made to enable women to engage in public works employment, as further described.
 - Develop social services in rural areas, such as health and child care, to ease the unpaid (largely reproductive) work burden on rural women and improve their lives.
 - Improve women's access to land (e.g. through preferential treatment in land titling or land reform programmes), and raise awareness on women's legal or customary rights to inherit or buy land.
 - Promote labour-saving technologies to ease women's workloads.
 - Introduce affirmative action for women workers and entrepreneurs (e.g. jobs, training, credit, child care, representation in decision-making processes, legal rights to own property and engage in legal acts without a male relative's signature, fiscal incentives and other benefits) as women often do not assert their legal rights because they fear challenging existing practices and norms.
 - Encourage women to undertake paid work in farming and agro-industries and to develop their experience and skills to improve future job prospects.
- Encourage or initiate public works programmes that can contribute to enhancing gender equality in rural employment by fulfilling the following objectives:
 - Make it easier for women to participate on equal terms with men through education, training, child-care facilities, etc.
 - Create assets, such as vehicles, water pumps or wells and stoves, that reduce aspects of women's domestic workloads and thus facilitate their participation in the programmes.
 - Develop mechanisms that allow women to establish a stable working history to attract potential future employers.
 - Provide financial services to help women and men save and/or invest their savings/earnings in new economic activities, thus enhancing the long-term benefits of the public works programmes.

- Gain a better understanding of public works initiatives and the determinants of their success and long-term effects.
 - Explore investment opportunities in rural infrastructure or activities designed in crisis recovery situations, as they provide an opportunity for generating rural employment and often reach isolated rural areas, thus benefiting vulnerable populations, including indigenous people and rural women.
4. Develop gender-sensitive strategies to eliminate the worst forms of child labour in agriculture.
- Low family incomes, the absence of schools, the lack of regulations and enforcement, and ingrained attitudes and perceptions about the roles of children in rural areas are only some of the numerous factors which make child labour in agriculture particularly difficult to tackle and eliminate. Policy-makers should first recognize and tackle household poverty as the major underlying cause of child labour. Poverty reduction is the starting point for successful strategies against child labour, since improving overall household economic situations (through a set of actions such as improving access to land and agricultural productivity, diversifying economic opportunities, improving wages and accessing social benefits and health care) can improve families' income security and reduce dependence on extra labour or income supplied by children, especially rural girls.
 - Gender-sensitive policy options for governments (with the support of civil society and local community groups) to tackle child labour could include the following:
 - Ratifying and implementing international conventions on the Rights of the Child, which provide an important framework for addressing issues of child labour and for ensuring that girls receive special attention. Priorities include: the United Nations Convention on the Rights of the Child (1989), the ILO Convention No. 138 on Minimum Age (1973), and the ILO Convention No. 182 on Worst Forms of Child Labour (1999).²²
 - Supporting the International Partnership for Cooperation on Child Labour in Agriculture (set up by ILO, FAO, IFAD and other international organizations²³) at national levels, with the help of national ministries of agriculture, agricultural extension services, farmers' cooperatives and producers' organizations.
 - Strengthening the monitoring, regulation and enforcement of child labour legislation in rural areas.
 - Undertaking sex-disaggregated data collection and gender analysis. Since child labour in agriculture is mostly informal, information is lacking. Quantitative surveys are necessary to assess the magnitude, employment profile and gender distribution of child labour in agriculture, and to design appropriate and differentiated support to boys and girls. The active participation of girls and women in research and evaluation activities is essential.
 - Consolidating gender and child labour mainstreaming by checking that both issues are systematically integrated into the planning, implementation, monitoring and evaluation of policies and programmes with the aim of reducing the supply of and demand for child labour.

22 The ILO's Global Action Plan on the Elimination of Child Labour aims at eliminating all worst forms of child labour by 2016.

23 The partnership includes the International Labour Organization (ILO), Food and Agriculture Organization (FAO), International Funds for Agricultural Development (IFAD), the Consultative Group on International Agricultural Research (CGIAR, including IFPRI), International Federation of Agricultural Producers (IFAP) and International Union of Food (IUF).

- Setting up awareness-raising and training opportunities for rural employers and parents, and bringing governments, agencies and families together to look for solutions to the problem of female child labour. For example:
 - › support the development of labour saving technology to take pressure off families;
 - › develop child-care facilities where working parents can leave their children so that they receive appropriate care in their parents' absence and girls looking after their younger brothers and sisters can go to school;
 - › provide compulsory, free and quality education of good for all children, with a special effort to encourage rural girls to attend schools.
- Ensuring that all rural girls and boys enter the education system and make school accessible (with adequate equipment and infrastructure and public transport for those who live in remote areas) and relevant for rural girls. School programmes are often designed without any regard for gender differences; the curricula should be adapted to the daily life of rural children, according to their individual profiles (e.g. gender, age and social origins). FAO's Junior Farmer Field and Life School (JFFLS) approach is a good example of specific training designed and adapted to rural youth's needs in poor countries (see Box II-15).
- Improving skills training in agriculture for girls so that when they reach the minimum age of employment, these skills contribute to increasing their incomes and the productivity and profitability of the local agricultural sector.

5.2.2. Employment creation

Employment needs to be created through initiatives and policies that promote sustainable and productive employment. Policy-makers must seek to ensure that everyone, men and women, has equal access to work.

BOX II-15

The Junior Farmer Field and Life School (JFFLS)

Initiated and disseminated by FAO, the JFFLS approach has a unique learning methodology and curriculum which combines both agricultural and life skills. An innovative aspect of the JFFLS is the way youth are encouraged to develop as people. A school timetable includes cultural activities such as singing, dancing and theatre. This allows the youth to develop confidence while keeping local cultural traditions alive.

The one-year learning programme follows the crop cycle; links are established between agriculture, nutrition, gender equality and life-skills knowledge so that young participants learn to grow healthy crops while making informed decisions for leading healthy lives. Participatory field activities include crop selection and cultivation, land preparation, pest management, cultivation of medicinal plants and income generation. Local theatre, art, dance or songs are also integral aspects of each JFFLS day.

Implemented by community facilitators, the JFFLS curriculum addresses a wide range of issues such as gender sensitivity, child protection, psycho-social support, nutrition, health, hygiene, sanitation, education and business skills, as well as ad-hoc modules for child labour prevention and land and property rights, if needed. Experience has shown that the schools provide a safe and social space for boys and girls, enabling them to develop their self-esteem and confidence.

The local community plays an important role in monitoring and implementing the schools, including providing land and volunteers. A JFFLS is run by a small group of people, often including a local extension worker and a teacher.

Source: FAO, 2009. *Rural Youth employment and the JFFLS*.

To achieve this goal for women in rural areas, the following recommendations were made:

- Reduce constraints in access to land, finance, market information and technology.
 - Women's differential and inferior access to assets, endowments and opportunities often results in lower productivity and income. Lack of access to land is not always the most binding constraint to women's agricultural production and productivity, especially in countries where land is abundant (e.g. parts of sub-Saharan Africa). In such countries, labour shortages can be a more fundamental constraint. For this reason, critical policy interventions should include the provision of agricultural and domestic technologies that enhance labour productivity, smooth out peak labour demand in certain seasons for labour-intensive operations, and/or reduce the time women (and their daughters) spend in domestic chores (e.g. running water and electricity – or at least improved wells or pumps to facilitate water collection; wood lots or improved stoves to reduce time and effort spent collecting fuel; mills for processing cereals).
 - However, in land-scarce countries, such as India, innovative approaches are urgently needed (e.g. integrated programmes that support landless women's collective purchase of land, financial services and training in environmentally-friendly farming practices), in addition to legislation to improve equality in women's land rights. Mere access to microcredit does not necessarily enhance self-employment of women by enabling them to start micro-enterprises. In some cases, credit directed towards women is used by their husbands for their own or for male-controlled family businesses. Thus, it is also crucial to promote attitudinal changes in the sociocultural environment that will have an impact on intra-household dynamics to allow poor women to develop, own and manage micro-enterprises.
- Promote female education and vocational training in rural areas for all age groups.
 - For children, it is important to develop innovative teaching methods that are gender sensitive and treat rural girls and boys equally. School systems which channel boys and girls into different subject areas at a very early stage reinforce gender labour market segregation and unquestioned acceptance of girls to engage in traditional female tasks that are often of lower status. Culturally sensitive strategies are needed to entice rural girls into school. WFP has been doing this in Malawi through a food distribution programme (at school), targeted at girls (see Box II-16). It is important to broaden the training skills offered to older girls to complement agriculture work and to ensure that older boys are also given opportunities for agriculture-related skills training. Without training, it becomes difficult to build a new generation of farmers and rural workers who can increase local agricultural productivity and profitability. There is an overall need to focus on agri-market-oriented training alternatives for both young women and men.
 - For adults, gender-sensitive extension services can play a very important role in training and empowering women by:
 - › increasing women's agricultural knowledge; this has the potential to increase labour productivity in agriculture-based contexts (especially in Africa), and increase food security at the household level;
 - › providing opportunities for technical education that can build women's entrepreneurial skills for self-employment and wage employment. Training women in income-generating activities that can be performed at home (such as dairy processing, cashmere production and processing, handicrafts, carpet and felt making) can generate very positive effects on family welfare. It is important

BOX II-16**Gender-sensitive school distribution of food by World Food Programme in Malawi**

Abigail Kagwa can tell you exactly how many days she has spent at school this month. “Today is my 18th day,” she says with a broad smile. “That means I will get a bag of maize at the end of the month to take home to my family”. So will hundreds of other girls at Mdzobwe primary school in central Malawi, where farmers tend small plots of maize and vegetables. As an incentive for parents to keep their daughters in class, the World Food Programme (WFP) provides a monthly take-home ration of 12.5 kg of maize to any girl who attends school for a minimum of 18 days each month.

When the programme began in 2001, far more boys attended Mdzobwe than girls. Most poor parents could only afford to send their sons to school. Daughters stayed behind to work in their homes or fields. Today, Mdzobwe's 1 600 girls easily outnumber boys, accounting for more than half of the student body. Indeed, there are 400 more girls than the total number of pupils before school feeding started.

Abigail's story is played out in many of the other 678 schools across Malawi, where WFP runs this programme in conjunction with the Ministry of Education – with rising numbers of girls attending and succeeding.

But 12-year-old Abigail is not only interested in collecting her monthly ration. “There are seven people in my family and we normally don't have enough food to eat breakfast at home,” she says. “So the meal I get at school every morning helps me a lot.” Every pupil receives a daily bowl of hot, nutritious maize porridge, providing them with another reason to turn up for school and the nutrition they need to concentrate in class.

“I want to be a nurse when I am older so that I can help people suffering from diseases,” Abigail says. “But I can only become a nurse if I stay in school and if I work hard. Without this food, it would be very difficult for me to do that.”

Source: WFP, 2009. <http://www.wfp.org/stories/meal-and-bag-maize-draw-malawi-girls-school>.

that potential employment opportunities are carefully identified before any training takes place and that the training is then tailored to provide women with the skills necessary to undertake such work. The benefits of such training can be further strengthened by encouraging/supporting the formation of self-managed producer groups or cooperatives to improve their members' access to markets and financial services and enhance their bargaining power;

- › training in the “intangibles” that facilitate change across different levels of capacity; these intangibles include the ability to learn, cooperate and develop self-respect and the communication and social competencies needed to articulate self-interests to bargain, participate in community and producer organizations and negotiate and peacefully resolve conflicts;
- › facilitating the formation of women's groups to sustain the adoption of different income-generating activities. One strategy would be to train and involve rural women more often in agricultural advisory services so that they can transfer their knowledge to other women and play an active role in widening the outreach of technical information and awareness of women's rights over productive assets and incomes.

5.2.3. Social protection

Work must be safe and it must provide security. Working conditions must meet health and safety regulations and the work must provide sufficient income for a person to live. The work must be dignified and it must offer prospects for personal development. It must also be linked to some form of social security that provides protection if the employee is unable to work.

Vulnerable employment is defined as persons who are less likely to have formal work arrangements or access to benefits or social protection programmes, and are therefore more

exposed to economic fluctuations (ILO, 2008). Vulnerability is often associated with gender pay gaps, low representation in producer and worker organizations, limited security, hazards and overall poverty. In all regions over the last decade, women's and men's employment conditions in rural labour markets have improved. An example of this improvement is in the shift from being unpaid contributors to family work to becoming waged workers or employers. In some specific contexts, where conflict, disease, death from HIV/AIDS and male out-migration have increased the relative proportion of women working in agriculture, the observed process of "feminization" of rural labour markets may contribute to this shift, with women having to play a more dominant role in rural activities.

However, the negative impacts of economic shocks and crises are not shared equally between men and women, and this must be taken into account when elaborating safety nets and other policies to mitigate the impacts of crises. Gender is a key factor in determining vulnerability to changes in food prices and job loss. While richer countries have the resources to establish safety nets and other policies to mitigate the impact of the crises, developing countries often lack these resources and systems. If these differentiated impacts are not taken into account in policy responses, countries run the risk of failing to assist those most severely affected and not being effective in mitigating the impacts of the crises.

Among the policy options presented to enhance social protection for women was the creation of social safety nets. In order to protect rural women workers, it is important to create the necessary safety nets that protect against dramatic changes in livelihoods for women and the poor, including shifts from formal to informal employment, migration and return migration. Rural women whose primary occupation is still agriculture are "weaker" in the sense that they are less able to change occupation because of their personal profile and location. The pathway out of poverty for them often includes heavy reliance on public programmes and public transfers such as food rations or public works, at least in the initial stages or in periods of economic downturns.

BOX II-17

India's National Rural Employment Guarantee Act

The National Rural Employment Guarantee Act (NREGA) was enacted in India in 2005. This Act guarantees 100 days of work to all rural households whose adult members are willing to perform unskilled manual labour. Women and men are paid an equal wage, which is the statutory minimum wage ascertained by the state government.

In May-June 2008, a survey of 1 060 NREGA workers in six Hindi-speaking states of North India was conducted to study the impact of the NREGA in the lives of workers. Significant benefits reported by the women include improvement in food security, health benefits and a chance to avoid hazardous work. Women have started earning the minimum wage, which is a big achievement. Further, a majority of women workers reported collecting their wages and keeping it.

The availability of local wage employment at the statutory minimum wage for women is a new development associated with the NREGA in many of the areas covered by the survey. However, the participation of women varies widely across the survey regions. Serious problems remain in implementation across states (such as the lack of availability of child care and the continued presence of illegal contractors). Given the critical gains made by women workers – in accessing work and income, food and health care for themselves and their families, and in leaving potentially hazardous work – it is critical that problems in implementation be resolved and not derail the gains.

Source: Khera and Nayak, 2009.

- In Brazil, for example, 1.45 percent of the gross domestic product (GDP) is dedicated to social protection in rural areas (e.g. for sickness, old age, maternity). Such social investment in favour of women has had positive impacts on rural welfare and poverty alleviation.
- Turkey has taken steps to establish public social security schemes for agricultural workers. A voluntary programme was established in 1983. Those who contribute at a prescribed level for at least 15 working days each month are entitled to old-age, invalidity or survivor's pensions.
- In Argentina, Guatemala and Nicaragua, in response to pressure from workers' organizations, social protection programmes have been developed and formalized in national legislations.
- In India, the National Rural Employment Guarantee Act (NREGA), implemented in 2005, created a safety net of a guaranteed minimum rural wage for the poorest households in rural India.

It is also important to create and/or support the implementing institutions (including through laws, services and budgets) to encourage women to engage in paid rural work. These may include access to knowledge and training, agricultural advisory services, credit and land tenure systems, child care and social services, targeted social protection and retirement schemes and measures for return migrants.

5.2.4. Social dialogue

Employees and employers must both be involved in planning a sound approach that assures decent work. Consultation and the freedom to express one's concerns contribute to decent work at all levels.

The organization and unionization of rural people is weak in general, but gender inequalities are further reflected in workers' and producers' representation, especially in organized labour institutions, such as trade unions and traditional forms of collective action, where women and women's interests are largely underrepresented. Women in rural areas often face difficulties in access to institutions, organizations and power. Therefore, they have less ability to translate work/effort into income and well-being, and limited participation in decision-making processes. On the contrary, when they manage to get organized in groups (see Box II-18), women can fully benefit.

To achieve women's participation in social dialogue, there was a consensus on the following options:

1. Support the organization and representation of women in rural communities (including through trade unions, cooperatives and grassroots associations) and stimulate women's participation in rural workers' and farmers' organizations.
 - Ensure freedom of association and promote rural women's participation in rural mixed workers' organizations to improve their legal and social protection and bargaining power, and to increase work security and wage rates.
 - Women may have difficulty joining and becoming active members of rural producers' organizations (RPOs), because often men are considered as the "active farmers" in the households and they therefore take part in RPO activities. To combat their lack of effective representation in RPOs and the fact that they cannot articulate their gender-related needs, women are more frequently setting up their

BOX II-18**Benefits of belonging to a group****In Java, joining a group helps accessing financial support**

Ibu Cacih is a 31-year-old woman who lives in Cingambul, Java. She tells, in her own words, how joining a group provided her with an entrée to credit, which in turn improved her financial situation.

“Before joining the group, I had to borrow money from a middleman and he was the one who set the prices for the items I made. Most of the time, once I’d paid back the loan, I didn’t have enough money left over and I’d have to borrow again. Since I joined the group, I sell my products for a good price and to whomever I want. I no longer depend on middlemen and I don’t have to borrow money. I feel better now because my children have shoes to wear to school and I have some savings. I also can associate with others in the community, and I can voice my opinion at meetings. I’m not poor anymore. I see my future much better.”

In rural India, a small loan opens up opportunities

For several years, Sarasu, a single mother of seven children in rural India struggled to feed her family on just 20 rupees a day (which is less than one Euro). Saving money was impossible, and without collateral, she could not qualify for a bank loan. The IFAD Tamil Nadu Women’s Development Project promoted what was at the time an innovative informal group-based system of lending and saving. The premise was simple – after women had paid into a communal account, they could access loans from local commercial banks, participating in the scheme.

Determined to improve the life of her family, Sarasu managed to save the required initial amount and took out a loan to buy two dairy cows. Sales from the milk raised her income to 100 rupees a day. Another loan helped her start a fuelwood business. Now, many years later, both loans have been repaid and two of Sarasu’s children have graduated from university.

Source: IFAD internal working document 2006 “From micro to small business: meeting the growth challenges faced by rural women”.

own organizations. In the last decade, new “women only” agricultural and rural organizations have grown significantly, along with women’s participation in existing cooperatives. The examples of “Las Hermanas”, a fair trade and organically certified coffee growers’ cooperative in Nicaragua, or “Café Feminino”, a Peruvian women’s coffee production cooperative, are self-explicit: aside from helping the women strengthen self-esteem and develop their technical and leadership capacities in all aspect of coffee production, the programme has helped them acquire land titles, thus ensuring their control over fundamental productive assets.

- Women’s organizations outside the agricultural sector, such as Self-Employed Women’s Association (“SEWA”) in India (see Box II-19), also have broadened their mandate to include support for agricultural income-generating activities, mainly through skills training and credit.
- In the case of mixed-gender cooperatives or organizations, particular attention needs to be paid to strengthening women’s self-confidence and voice since, in many cases, women are members merely on paper (to help the family access more credit from the cooperative or increase voting rights), while their male counterparts are the active members leading discussions and decision processes in the organizations. Strengthening women’s voice requires more than just ensuring that women are represented in mixed-gender organizations (which tells us little about their levels of participation and influence): women should actively learn and participate, bringing in specific objectives in the interests of the women’s membership, and have equal voting rights and influence with men in the organization.
- Promote women’s membership and leadership roles in farmers’ organizations and cooperatives that bring financial and marketing services, training and social and psychological support in the face of opposition.

BOX II-19**Self-Employed Women's Association (SEWA) - Farmers of Sabarkantha, India**

SEWA, a member-based organization with over one million poor informal-sector women workers, started a project, with the help of the World Bank and the Gujarat Land Development Corporation, in the semi-arid district of Sabarkantha to solve drinking water problems in villages. *"The striking feature of the Sabarkantha experience is the way trust was built among the local farmers by addressing their immediate problem (of drinking water) first."*

Gaining confidence among villagers, SEWA expanded its activities to creating savings groups, providing agricultural training (winter crops), securing the license to sell seeds in the local market, providing credit and market outlets and helping to access services (e.g. health and child care, insurance, legal aid, capacity building and communication). With the various activities, agricultural productivity improved: marginal women farmers (who were barely surviving on their own produce) could plant two or three crops a year instead of only one, which increased their income from Rs. 5 000 to Rs. 15 000 a year in less than three years. The higher income made it easier for women to borrow money to purchase cattle that can produce enough milk to earn Rs. 30 a day, comfortably helping the household out of poverty. In addition, the process of organizing these productive activities and supporting services for and by poor women, in a decentralized and affordable manner, has generated a solid bond of self-help.

Source: Elaborated from SEWA website (<http://www.sewa.org>).

- The Tamil Nadu Empowerment and Poverty Reduction project gives a good example of the empowerment of women and gender equity in a local project: at least one of the two leaders of the economic activity groups has to be a woman, and a quorum can be achieved at meetings only if 50 percent of the attendees are women. To ensure that project activities aimed at securing livelihoods and promoting activities are relevant to women, a special focus is given to providing women with access to skills, information, resources and assets.
- Provide entrepreneurship skills training in how to start a business and prepare business plans, perform basic accounting and record keeping, access and use loans and conduct management and marketing.
 - To start managing value chains at local levels, producers need to understand the requirements of processors, traders and retailers. Members need to commit

BOX II-20**Empowering women in Bosnia and Herzegovina through rural producers' organizations**

A women's producer association, established in 2003 in Tesanj, Bosnia and Herzegovina, provides members with a milk collection network to help them market surplus milk and increase members' household incomes. Subsequently, the producer organization started to assist members in accessing credit and equipment. The women purchased more animals from the Livestock and Rural Finance Development Project credit line to increase their production.

The project empowered these traditional milk producers to become more active within their communities, make greater contributions to their households, and thus improve the positions of their families and communities. Women's active membership in the producer association enabled them to improve their knowledge and skills about livestock production and marketing. Marketing of the milk created new jobs, increased incomes for rural men and women and improved livestock production. The producers' association is now thinking about expanding this positive experience to vegetable production and processing, thus providing services to a large number of agricultural producers.

Source: IFAD, n.d.

to continuous improvement in farm production, keep farm records, have access to independent information on market prices and trends, obtain a good understanding of the value chain, identify good commercial partners and develop trust. The example given by the IFAD project in Bosnia and Herzegovina illustrates how social capital can be built among farmers through the creation of a women's producer association.

- Support women's organizations in exploring and promoting opportunities for women to gain from simple value-adding strategies.
 - More than ever, because of increased competition and uncertainty in the export and domestic markets, female producers need to engage in collective processes to better manage their assets; access services, inputs, credit and markets; and contribute more effectively to decisions made with value-chain partners. The development of strong economic organizations can enable poor women to overcome high transaction costs, limited scales of production, poor access to a variety of resources and lack of political and bargaining power as individuals.
 - Producers' organizations can develop innovative approaches to product development, processing and marketing, which can help poor women without key productive assets (such as land) to enter value chains. In addition to the obvious economic advantages of such strategies, members of these creative groups, particularly women, improve self-confidence and their status in the community.
2. Raise gender awareness and promote inter-institutional collaboration when designing rural employment strategies and development policies.
- Ensure that dialogue mechanisms are established in policy formulation at community, provincial and national levels. Many different layers of dialogues can be established at different levels, for example:
 - the Dimitra project,²⁴ which is a participatory information and communication project contributing to improving the visibility of rural populations, women in particular. The goal of Dimitra is to highlight the role of women and men as producers, so that their respective interests are better taken into consideration and they can fully participate in the rural development of their communities and countries. Dimitra builds the capacities of rural populations, women in particular, through information dissemination and the exchange of experiences. It aims to help rural women and their organizations make their voices heard at national and international levels. In this way, it contributes to improving their living conditions and status by highlighting the importance and value of their contributions to food security and sustainable development. Dimitra also strives to make development actors more gender sensitive and to promote gender equality. Dimitra's work is guided by three important principles: (i) partnership – working closely with local partner organizations to highlight local knowledge; (ii) participation – active participation of civil society organizations; and (iii) networking – supporting the exchange of good practices, ideas and experiences.
 - the Farmers' Forum launched by IFAD, a bottom-up process of consultation and dialogue among small farmers' and rural producers' organizations, IFAD and governments, focused on rural development and poverty reduction. The Forum

²⁴ Launched in 1994, it has been an FAO project since 1998 and receives financial support from the European Commission, as well as from other bi- or multilateral funding agencies in the framework of its field activities. <http://www.fao.org/sd/dimitra>.

is rooted in concrete partnership and collaboration at the country and regional levels. Engagement with rural organizations at the field level and dialogue at the regional and international levels are articulated as mutually reinforcing processes. Following consultations at the national and regional levels, the Farmers' Forum has met every two years, since February 2006, for a global consultation, in conjunction with the Governing Council of IFAD. The last forum in February 2010 had a special focus on women's organizations.

- Elaborate gender-sensitive rural policies; the case of irrigation programmes is illustrative. Failure to take prevailing gender inequalities and discrimination into consideration when designing irrigation schemes creates the risk that these schemes will accelerate processes of social and economic marginalization, including landlessness, of poor rural women who mainly use irrigated land for subsistence production.
- Encourage grassroots participation in policy and programme design and legislate a role for local groups. Gender relations can be mediated through the empowerment of both men and women in rural society. Governments should seek to involve communities in decision-making processes, develop and strengthen women's own organizations and improve the coordination between horizontal and vertical farmers' organizations (in order to minimize risks and consolidate farming futures). A good example of grassroots participation in the elaboration of national policy is given in the organization of the post-harvest fisheries operators in the Gambia (see Box II-21).

BOX II-21

Post-harvest fishery activities in the Gambia

The post-harvest sector is a critical entry point for poverty alleviation in fisheries in the Gambia. It is largely dominated by women (more than 80 percent of the workforce), while the supply of fresh fish and raw material is dominated by men. Lacking viable organizations, the post-harvest operators had traditionally little potential of improving their livelihoods, particularly in terms of accessing credit and informational services and participating in decision making and the implementation of policies that have an impact on livelihoods. The poorest, often the women and the youth, were rarely involved in organizations. High illiteracy rates also contributed to the poor functioning of organizations.

When community-based organizations (CBOs) organized post-harvest fishery communities, and the National Fisheries Post-harvest Operators Platform was created, operators were able to articulate and advocate their concerns and participate in decision making at the policy level. The Fisheries Act was formulated in 2007.

Membership in the CBOs made a difference at the individual and collective levels. The CBOs helped by developing mutual understanding, trust and confidence among the members, providing a venue for socialization and discussion of common problems and issues, and enabling members to organize health and sanitation campaigns, such as beach clean-ups.

A legalized CBO, which became a member of the National Fisheries Post-harvest Operators Platform, helped its members access credit and savings schemes. CBOs can own assets, and in Kartong the village authorities have given the CBO the land where its drying racks will be built. The CBO is now working on the legal transfer of the ownership rights.

Source: FAO, 2007. *Sustainable Fisheries Livelihood Project / PP3*.

- Agricultural advisory services need to recognize female farmers (not strictly “head(s) of household”) and use methods that actually reach them (e.g. sending female extension agents out into highly sex-segregated societies, addressing women’s needs in media and using a range of information and communication technologies or using farmer field schools for experiential learning).
- Promote schemes that guarantee the right-to-employment because these can have significant benefits for women, including increased food security and a better ability to avoid hazardous work.
- Stimulate the legal reforms that are necessary to promote women’s economic and social empowerment (e.g. institutional reforms on land acquisition and inheritance and market reforms for accessing productive inputs and creating a policy environment conducive to entrepreneurship and private sector growth).
- Improve policy design to support equal market access for rural men and women who are:
 - agricultural producers: this would include providing better market contacts and information on prices (i.e. developing “vertical linkages” between production sites and market places); strengthening property rights for both men and women, especially women who face considerably more discrimination; providing better access to credit, technical assistance and capacity development; and creating efficiently managed producer organizations;
 - wage workers: this means that government and private partners should guarantee freedom of association; the design of national labour legislation in agriculture and agro-industries in compliance with international labour standards; appropriate labour inspections in rural areas; information campaigns about legal rights of the workers; and training and systems that value women’s skills and experience.

Conclusion

To conclude this second section of the publication, we have to remind the reader that its main objective was to highlight the richness and diversity of inputs shared and discussed at the workshop held in Rome in April 2009. All the workshop papers and abstracts can be found in their original forms at <http://www.fao-ilo.org>.

Many gaps in available data and lack of analytical approaches and rigour frequently handicap the efforts of policy-makers to address these crucial issues adequately when designing poverty alleviation strategies. Through this workshop, which gathered specialists from all over the world to share their knowledge, questions, experiences and understanding of these very complex issues, FAO, IFAD and ILO aimed to gain more statistical data, field-based evidence and insights into the gender dimensions of agricultural and rural employment, in order to strengthen policy design.

However, the policy suggestions that are explored in this section which emanated from the workshop discussions are by no means exhaustive. They should be seen to complement existing policy recommendations. The three agencies have committed to consider these policy discussions in their development of policy briefs on selected topics.

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PART III

Selected papers Workshop contributions

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Tom Hertz, Ana Paula de la O-Campos, Alberto Zezza, Paul Winters,
Esteban J. Quiñones, Carlo Azzarri and Benjamin Davis

Miet Maertens and Johan F.M. Swinnen

Mac Mahiri, James Chakwizira and Charles Nhemachena

Thelma Paris, Maria Fay Rola-Rubzen, Joyce Luis,
Truong Thi Ngoc Chi, Chaicharn Wongsanum and Donald Villanueva

Lina Salazar and Agnes Quisumbing

Economic liberalization, changing livelihoods and gender dimensions in rural Mexico

Kirsten Appendini, El Colegio de México

Introduction

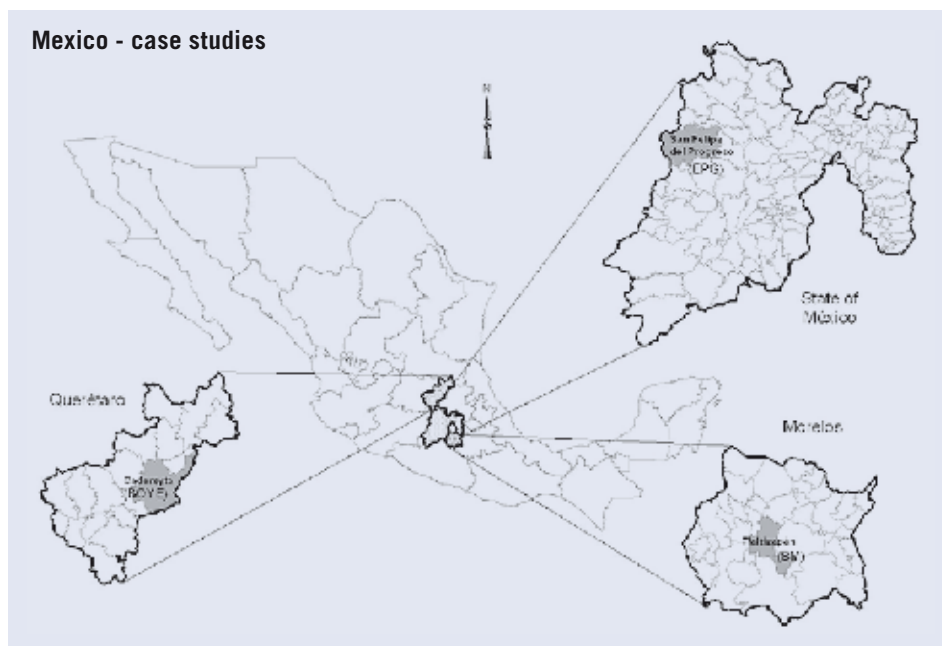
In January 2008, agricultural trade was totally liberalized within the North American Free Trade Agreement (NAFTA), ending a 15-year period of relative protection for Mexico's most sensitive crops.²⁵ Trade liberalization has had a profound impact on agriculture. While high-value export crops have performed successfully, the same can not be said for food staples grown for the domestic market and now fully exposed to international competition. The most important of these is maize, the main food staple of the urban and rural populations and grown by most small farmers throughout the country. Consequently, liberalization has affected peasant livelihoods.

But trade liberalization, with declining real prices of basic crops, is not the only factor that has had an impact on Mexican farmers. Structural adjustment policies in the 1980s and the reform of agricultural policies, starting in the early 1990s with the dismantling of direct subsidies to agriculture through credit, technical assistance, input prices, marketing boards and price supports, had changed the rural economic environment. An important sector of small- and medium-sized farmers had benefited from agricultural subsidies under the former model of development in a closed economy which aimed at self-sufficiency in food staples. These farmers have been the losers in the open-market economy. With the policies reforms of the 1990s, they were by and large excluded from new policies to prompt agricultural growth – now targeted at the competitive sectors of farmers – and channeled to social programmes. These programmes took on increasing importance during the 1990s and have continued to the present.²⁶

In the process of adjusting to the new economic environment, rural livelihoods also changed. However this was not simply a response to trade liberalization and policy change. Over decades, poor farmers had been engaged in complex livelihood strategies in order to subsist. Incomes from farming were hardly ever enough to sustain the household, hence wage work was performed outside the farm, either in agriculture or non-agricultural activities. Temporary and long-term migration has always been part of peasant livelihoods, as is well documented in development literature. What had changed was that agriculture was no longer the core of the rural household's livelihood strategies, which formerly allocated family labour and other resources according to the needs of agriculture. Today, for many peasant households, farming has become a complement

²⁵ Maize, milk products and sugar cane. During the period, import quotas and tariffs phased out.

²⁶ For references in English, see Appendini, 2008; Cornelius and Myhre, 1998; Ita, de 2008; Hewitt, 1994; Janvry de, 1997; Randall, 1996.



to other income-generating activities. Local economies are driven by non-agricultural activities such as petty commerce, jobs in workshops or personal services demanding unskilled labour. The informal economy has soared on these bases. Even so, employment opportunities at the regional or local level are constrained to unskilled and low-quality jobs and migration is the most viable option for earning an income.

In rural Mexico, the social, political and cultural environments have also changed. In a large country with diverse regions, the process of change varies in its complexity and outcomes. 'Rural' is no longer identified with agriculture and in most regions it is no longer identified with isolation and lack of access to markets and a number of public goods and services. Infrastructure and communications, basic education and even health services have reached many regions of rural Mexico; migration and particularly transnational migration have linked rural villages to global society and culture. The complex interrelations between economic, social, political and cultural processes are transforming rural life and spaces. Changes in rural livelihoods are both processes of long-term continuities as well as ruptures linked to policy change.

This paper will focus on the socio-economic transformation of rural livelihoods and its gender dimensions, based on three case studies in the central rural highlands. The main issues addressed are the effects of a declining agriculture and the increase in non-farm activities on rural livelihoods. The economic role of women is changing in this context and gender relations are being questioned. In this research, we focused on the women's own perspectives on these changes.

The three communities studied are located in states bordering Mexico City. The land was distributed under agrarian reform in the late 1930s; today the average holdings per household is 1.5 hectares in two of the communities studied – Emilio Portes Gil (EPG) and Boye – and 4.1 hectares in Barranca Honda (BH). Maize is the main crop and cattle are also raised in the latter two communities. These communities illustrate a changing rural environment in the densely populated areas of the central Mexican highlands, located within the area of influence of metropolitan Mexico City and a network of regional cities and towns. The rural

landscape is rapidly being transformed, as the rural-urban divide is no longer dichotomized by economic activities and there is an interpenetration of social and cultural processes. It must therefore be noted that the communities in the region do not represent the overall change in rural Mexico, particularly in the more isolated and poorer regions of the country.²⁷

The communities studied have common trends as mentioned above, but they also differ because of their precise location in different subregions of Central Mexico. The process of change in each case differs according to the micro agro-ecological characteristics, opportunities for market access for crops and labour markets, and government development programmes through time (see Annex 1 for a description of the three communities).

1. Trends in agriculture and rural employment under trade liberalization

Agriculture in Mexico has shown a long-term decline which continues under trade liberalization. In 2007, it represented 3.8 percent of the gross national product. Non-traditional exports such as fruits and vegetables have increased substantially, representing 85 percent of total agriculture export value in 2007, but imports of basic food crops have soared such that the agriculture trade balance runs an increasing deficit. Maize – the main food staple – increased from 2.6 to 7.5 million tonnes from 1994 to 2007 and represents 21.4 percent of the total value of agricultural imports. Mexican peasants living on rainfed land and mainly growing maize are not competitive in an open market and have withdrawn from producing a marketable surplus because of decreasing prices and the withdrawal of subsidies for basic crops.

Small farmers have been adjusting to trade liberalization and changing agricultural policies for more than a decade. Maize has been a key issue in this process. Maize is grown by 3 million farmers, of whom 67 percent are classified as producers with low income (Vega and Ramírez, 2004 cited by Rello and Saavedra, 2007:85). Today, peasants mainly grow maize for subsistence and earn cash from non-farm income sources.²⁸ This has had an impact on the allocation of family labour, according to age, sex and kinship.

As a consequence, the population engaged in the agricultural sector has declined during the period of policy reforms (the 1990s) and its consolidation (2000 to date). At the national level, occupations in agriculture have declined by 2.4 million (30 percent). In the first period, the decrease affected men (15 percent decrease) much more than women (4.1 percent decrease); but from 2000-2007, the decline for women in agriculture was 27 percent versus 16 percent for men. This indicates that women are not tending to substitute for male labour in agriculture. In 2007, women's participation in agricultural activities was 12.2 percent of the total, compared with 13.6 percent in 2000. Within agriculture, women represent mainly non-paid family labour (50 percent of total women employed in 2007), while men are self-employed as farmers. Wage work has gained relative importance for men – from 24-36 percent for the overall period (1991-2007), but women's participation in wage work has remained relatively stable (27-28 percent).

²⁷ The communities were chosen as part of a larger project revisiting the research sites. Financial support was provided by CONACYT (the Mexican Council for Science and Technology); the FAO Gender and Population Programme provided support for the gender component of the field work. The author is grateful to the sponsors and particularly to Zoraida García for this support. For results, see Appendini and De Luca, 2006; Appendini and Torres-Mazuera, 2008.

²⁸ Domestic supply of maize has switched to irrigated lands on large farms, mainly in the northwestern state of Sinaloa.

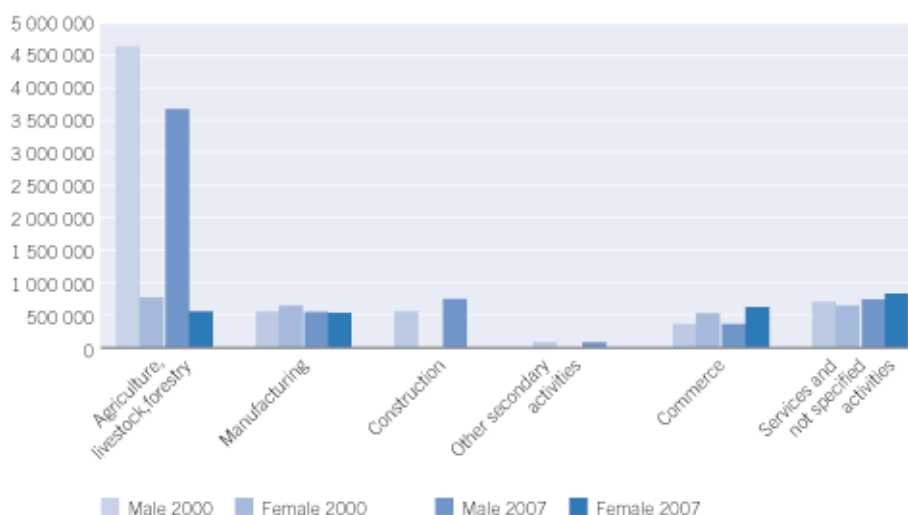
Hence, neoliberal policy expectations for export crops to create substantial rural employment are not reflected in national data. Also, the decline in peasant agriculture and the advent of mechanization have decreased the demand for labour. In both cases, women have not had opportunities for increased rural wage work.

A total of 72.6 percent of agricultural occupations are concentrated in rural localities (up to 2 500 inhabitants). By looking at the national data on occupations in rural localities, we may illustrate the occupation trends in the Mexican countryside (see Graph III-1).

The number of people engaged in agriculture in rural localities declined by 1.2 million from 2000-2007, which has mainly affected men.²⁹ In agricultural activities, participation of both men and women declined in the order of 8 percent. Agriculture remains a male activity, with 60.7 of men engaged, while only 21 percent of women are engaged. Being a farmer, that is, self-employed in agriculture, is related to gender – being male – since the possession of land is in the hands of men. Being a farmer is also associated with age, the average age being 55 years in the *ejidos*.³⁰ Hence, women belonging to a farm household often remain as unpaid family labour (Deere, 2005; González and Salles, 1995; Pacheco, n.d.).

Occupational trends in non-agricultural activities show some notable changes with respect to participation by gender. In 2000, manufacturing accounted for 25 percent of the total occupations for rural women; this dropped to 21 percent in 2007. Men have retained their participation in the industrial sector mainly due to an increase in construction – traditional rural employment for men. However, men have remained in the manufacturing industry, versus a decline in women's participation. In 2000 in absolute

GRAPH III-1
Rural Population by economic sub-sector and gender



Source: INEGI, Encuesta Nacional de Ocupación y Empleo, 2007.

²⁹ Total population in rural localities decreased by 450 000 from 2000 to 2005. Data on occupations for rural localities is only available from the year 2000 on.

³⁰ *Ejido* refers to communities holding land distributed under agrarian reform. Up to 1971, Agrarian Law only gave rights to land distributed under agrarian reform to male heads of household. From 1971, Agrarian Law gives equal rights to men and women, but women only account for 25 percent of *ejidatarios*.

numbers, more rural women were occupied in manufacturing than men, implying that the rural *maquila* (in-bond manufacturing) industry mainly demanded female labour. In 2007 this trend was reversed. Trade and services increasingly account for rural women's labour participation. Women's occupation in trade increased from 19 percent in 2000 to 25 percent in 2007. In the case of men, participation only increased from 15 percent to 17.4 percent. In 2007, women outnumbered men in absolute numbers in these two activities. We may therefore ask whether the constrained employment opportunities in rural Mexico are displacing women in favour of men in manufacturing jobs, often the better opportunity for a wage in rural contexts, while confining women to trade and services, most likely in informal work.

Women are mainly occupied in petty trade and personal services (39 percent of women in total female occupations) that are likely to be low-quality jobs (García, 2007). Men participate in a wider range of activities such as communications, transport and government jobs. Hence, rural populations still face a segmented labour market by gender – and age. Young and single women enter wage work while older and married women are often self-employed, mainly in commerce and services.³¹ Rather than a 'feminization of agriculture' there is a feminization of the rural non-farm economy.

2. Adjusting livelihoods in the central highlands of rural Mexico: a generational perspective from women

The three case studies carried out in 2003-2004 illustrate how small farmers in *ejido* households have adjusted to macroeconomic changes over time. Public policies have played a key role in determining the opportunities and constraints for households. Structural adjustment and trade liberalization mounted on trends that were already ongoing, but also marked ruptures, mainly closing options for farmers and certainly for the younger generations in farming activities. The interviews and focus groups carried out with women of three cohorts assessed both continuity and change in the livelihoods of rural households throughout the past three decades (see Annex 2 for a description of the case study methodology).

The elder women (around 60 years) recalled peasant livelihoods when agriculture was the core of the household and the role of women was determined by a well-defined division of labour. Women were in charge of work within the household as well as specific chores in the fields and the care of small animals. Working in the fields was done under supervision of a male, whether spouse, in-law or parent. Hence, women were subordinate to elders and males both as labourers as well as members of the family. Upon marriage, this meant a subordinate position in the household to the in-laws (and to elder females), as young couples could live many years in the household before acquiring land of their own. In those days, work was hard and farm households were poor. There were no facilities to ease women's workload: they had to walk far to fetch water and gather wood to cook, grind maize to make *masa* (maize cooked with lime to make dough) for the *tortillas*. Also they had to care for their many children, and there were no schools, health clinics, doctors or communication. Poverty had a different meaning then, than today. The failure of a crop could mean hunger, illness and the death of an infant. Jobs were only as field workers, if available. Land was the key resource to avoiding destitution.

31 This trend has also been assessed in other Latin American countries (Deere, 2005).

Nonetheless, women expressed that the economic and social dimensions of life were more structured, within the household and the community. Also, the land was more productive: the *milpa* (plot of land on which maize grows) and the animals enabled a family to live from agriculture. Now ‘the land has tired out’ say the women, and no one can live only by its means.

Daughters (around 45 years) of these women faced a changed environment. Public services had come to the villages of the central highlands in Mexico. Health and education became accessible to these women and their children (and they had fewer children). Communication networks and transport connected the communities with the regional towns and main cities, including Mexico City. Temporary migration became part of the livelihood pattern as men went to work in construction in regional cities – in public works building regional infrastructure. Single young women would work as domestic servants in the cities. As adults, these women were part of households in which *ejidatarios* (see footnote 6) benefited from agricultural subsidies as Mexico strived for self-sufficiency in basic food staples. Work in the fields diminished as tractors and chemical inputs were introduced, and agriculture became even more a male occupation. Some women were able to enrol in a public programme to become teachers in bilingual indigenous primary schools, while others had jobs in a nearby *maquila* factory and experienced industrial wage work.³² The domestic workload decreased with the availability of electricity and running water. Also some domestic appliances entered the households and, most important, the maize kernels were taken to the electric mill to be ground, saving women hours of drudgery when making *tortillas*. The better-off households – those that had been able to benefit from public programmes for agricultural and livestock development – could invest in small local businesses. Married women frequently worked as non-paid family labour in small grocery shops, or helped their husband with activities such as managing a warehouse, renting a tractor or truck, etc. With better economic opportunities, young couples could acquire independent housing and women could free themselves of direct submission to their spouse’s parents. Rural Mexico, at least in the less isolated regions of the country, seemed to be on the road to development.

Economic restructuring with the Mexican economy’s recurrent crises (1982, 1987, 1994-5) changed the continuity of ‘progress’. Maize has become less profitable to market, the younger generations no longer want to work in agriculture, and they do not have access to land which is still held by parents. Education and the social-cultural impact of urban lifestyles have changed the expectations of the young. They see more opportunities in migrating, until recently, to ‘the north’ (USA). The women between the ages of 20 and 35 participating in the focus groups often belonged to independent households that had no access to land. In some cases, the spouses are working in the USA and send remittances. Women who were working were engaged in a number of activities, including catalogue sales, *maquila* in small workshops, piecemeal contractors, or in grocery stores or shops that provide ‘modern’ services to local consumers such as photocopying or hairdressing. Few women and men have stable jobs. Even the opportunities as public employees or in factory jobs have decreased in the villages studied. Peasant society is a thing of the past. But rural life is valued, as people perceive rural localities as places of residence, where children can grow up in a non-polluted, healthy and non-violent environment, close to family and kin.³³ The contradiction is that there is no local employment to enable

32 The employment opportunities varied according to the community, each located in a different geographical area.

33 For a discussion of changing identities in the indigenous ejido studied, see Torres-Mazuera, 2008a and 2008b.

this generation to earn stable incomes. Hence, dependence on income transfers – from poverty alleviation programmes and remittances – have increasingly become the means for sustaining household consumption. Household chores have eased and consumption patterns are also changing with access to industrialized food. *Tortillas* are still the staple for each meal, but now *tortillas* can be bought at the local *tortillería*. It is no longer necessary to bake them at home. But other burdens have been added to the chores of the family: namely complying with obligations imposed by public programmes both at the household level and for community services. For example, women of families that qualify for the poverty programme ‘Oportunidades’ must attend conferences and have health check-ups at the local clinic so as not to lose bimonthly payments; they often must help clean the clinic and the school; also it is often women who attend community meetings to deal with problems of local services and infrastructure.

3. Changing livelihoods: evidence from survey data in three communities

Maize production has decreased at the regional level in two cases: for the *municipio* (administrative unit, equivalent to a county) of Tlatlitzapan, where BH is located, the decline has been at a yearly rate of 15.8 percent; in San Felipe del Progreso, an important maize region to which EPG belongs, the rate of decline is 44 percent. Only in Cadereyta, where maize has always been confined to subsistence, has the crop remained stable.

As a consequence, the percentage of the population that is economically active in agriculture decreased substantially from 1990 to 2000: in EPG (from 20.8 to 10.5 percent) and in BH (from 43 to 35.5 percent). Only in Boye has participation in agriculture increased (from 28.5 to 32.6 percent). Survey data collected in 2003 confirmed low female participation in agriculture in relation to total occupations: the female population economically active in agriculture was 16 percent in EPG, 12 percent in Boye and 9.3 percent in BH. Agriculture was mainly the occupation of the head of the household and a male occupation. All mechanized practices and spraying with chemical inputs, such as fertilizers, or weeding are male occupations. When women do participate in the fields, their tasks are manual. In EPG, women belonging to the household participated in most field practices, but male labour days outnumbered female, except harvesting, for which 77 percent of labour days were female.³⁴ In Boye, women also participated in most tasks, but accounted for less than one-third of the total labour days. In BH the participation of female labour-days was not significant. In the two latter communities, hired labour by the household was male labour.

Women expressed that they were not keen about working the land. There was little incentive to invest in agriculture because of low prices of maize (before 2006). In fact, young women participating in the focus groups had little interest in discussing agriculture at all. When responsible for the plot, women saw this as an extra burden on their workload and not as a way of acquiring responsibility, autonomy or acknowledgement. Agriculture was considered a male activity and decisions were made by the men.

In sum, gender relations in agricultural activities have not changed the subordinate position of women, even though they no longer work side by side with the men but are

34 For a study of women's participation in agriculture in the early 1990s, see Preibisch, 2000.

more apt to be responsible for the plot, when men are absent due to migration (Boye and BH). Women are receiving instructions over the phone from absent husbands or from their kin remaining in the village.

As a consequence, women saw no reason to gain greater access to land as a productive resource. However, land was valued as an important asset for residential purposes and/or a claim in family inheritance. Patterns of inheritance are also changing, as land may be subdivided among children. The custom of passing the land on to the youngest son who would continue farming and be responsible for the elders is now changing. As daughters contribute to household income, they may be more apt to claim part of the family inheritance. Parents may negotiate the promise of future inheritance to the children who will care for them, regardless of their gender. In all three communities, there was an appreciation of intention of heads of household for a more egalitarian distribution of land to sons and daughters.³⁵

Non-agricultural occupations accounted for the main female occupations in the three communities, following the trend observed in the national-level data. Non-agricultural occupations were, with few exceptions, related to 'traditional' jobs that had been part of livelihoods for several generations. In some cases, access to formal wage employment has eroded, as is the case in Boye, where there were no further public works in the region – male jobs – and the garment *maquila* had downgraded its fringe benefits and wages, making jobs less attractive. In EPG, quality jobs such as teachers were already saturated and no longer accessible to the young generations. Even the agricultural labour market for day labourers, available to the populations of BH in the 1970s and 1980s, had contracted, because of the disappearance of cash crops for the Mexican market.

The 2003 household survey confirmed the narrow employment spectrum for household members, whether in the locality or outside. An overview of the labour force in households by kinship related to the head of household follows:³⁶ Women who are heads of households or spouses of the head of household responded that their main occupation was in domestic work with no pay. Male heads of household in non-agricultural occupations worked in construction (BH) or petty trade (EPG, mainly as street vendors outside the community). In Boye, men are in the category 'other wage work', including work in the US and in construction. That is, both women and men were engaged in 'traditional' occupations, except in the case of migrants, whose occupations were often unaccounted for since informants were not aware of how they were employed.

The occupational patterns from a generational perspective showed a slightly broader perspective for 'sons' of the household, but not 'daughters' (15 years and older). 'Traditional' non-agricultural activities still predominate but differences were found by community and gender.

For 'daughters', engagement in unpaid domestic work is the main activity in all three communities, showing little change over time.³⁷ In EPG there is more diversification of occupations: 'sons' follow their 'fathers' in agriculture, petty commerce, construction and government employment, but are also present in 'other income-generating' occupations (mainly the migrants). EPG is the only community in which employment in public services is available. This is mainly as grade-school teachers and is due to a 1970s government

35 This has been observed in other rural regions of Mexico (Arias, 2009).

36 For a detailed analysis of the survey data, see Appendini and De Luca, 2006:41-48.

37 Included 'daughters' of the household that have established their own households, showing little change for women.

programme for becoming indigenous and bilingual rural teachers. According to the survey, less than 9 percent of the women were teachers. For 'daughters', employment besides domestic unpaid work is in domestic employment (EPG). For generations, the women of the region have been employed as such in Mexico City and in the state capital, Toluca.

In the other two communities, occupations that account for 9 percent or more of the categories 'sons' and 'daughters' are few or dispersed. In Boye, occupations for women are dispersed in 'other paid work', such as employed in stores or the garment factory, both located in nearby towns. In the case of 'sons', who had emigrated, it was difficult to obtain the occupational category. The same is the case for BH, including 'daughters'. BH was the only community in which female migration was significant. A total of 9 percent of 'daughters' in BH were also engaged in 'other paid activities', mainly working at a local garment workshop or doing piecemeal work in their homes, such as assembling costume jewellery.

In sum, occupations are concentrated in low-skill jobs, and have not changed significantly from one generation to the next. In each community, livelihood strategies combine agriculture, if land is available, and non-farm occupations that have predominated over time, according to the economic trends of each community: construction, domestic employment, petty trade and teaching in EPG; and migration in Boye and BH.

4. Gender perspectives on income-earning activities

In the interviews and focus groups, women of different cohorts expressed their opinions and perceptions about working for an income related to their role in the household, and particularly in relation to their spouses. There was a general consensus that the income earned by women was necessary and often covered special needs. Work outside the home and earning money also contributed to their self-esteem. However, working for an income added to the work burden of women, as men seldom shared domestic chores.

In all three communities, gender relations were entrenched in a male-dominated ideology (*machismo*). In the focus groups, women confirmed that husbands were openly against or at best dubious about having their spouse work outside the home. The need to ask 'permission' to work and abide by the husband's opinion was a serious issue for young and middle-aged women. Opinions differed by community, age and educational status. Women in BH expressed themselves as more autonomous in their decisions, while Boye women (recipients of remittances) were much more restrained, especially the young women. In EPG, there was a marked difference according to education and employment status. The publicly employed women participating in the EPG focus group had openly confronted partners and family about their autonomy.

An important issue concerning gender relations refers to migration. Labour migration is an important source of income for households in the communities studied, as in many other parts of rural Mexico. Traditional patterns of migration for women have been to work as domestic servants, and for men to work in urban construction sites or public regional works. This type of migration was temporary and related to the agricultural cycle since family labour resumed in the fields in peak seasons. Today migration stretches over longer periods of time.

International migration is important, particularly in Boye and BH. According to the 2003 survey data, 68 percent of men living outside the household in Boye and 63 percent in

BH were in the USA. Only in BH was female migration reported. In the case of EPG, migration was mainly to other states (one-third of household members living outside the household, both men and women). In Boye, 27 percent of the households received income from members away from the household; in BH the figure was 47 percent and in EPG 21 percent.

Although it is by and large men who migrate in the communities, migration has an impact on the role of women within the household as their responsibilities and workload increase. Women are in charge of managing income and daily consumption expenses, investing in and supervising agricultural activities, overseeing the construction of a house, etc. Women are alone in bringing up and educating the children, caring for the elderly and participating in community affairs.

Being the spouse of a migrant had complex effects on gender relations within the household and the community. In the focus groups, women often expressed ambiguity about being on their own, since they had more work and no one with whom to share daily decision-making. This was a particular concern when it came to the upbringing of children. While women around 45 expressed that they had more freedom in their daily lives, young women were concerned about the absence of a partner and the children's father.

In the case of one community, Boye, in which migration has a history of two decades, women worked less outside the home, as remittances brought in a relatively reliable income. They were also more prone to the social supervision of kin and neighbours and the long-distance control of spouses. In BH, women expressed less ambiguity with respect to the absence of men; they were not subject to supervision by families and hence were more autonomous. The women wanted the men to live in the villages and have jobs. The problem is social, not individual.

5. Concluding remarks on changing livelihoods and gender dimensions

Trade liberalization and neoliberal policy excluded smallholder agriculture from markets and intensified the need for non-farm income. Non-farm occupations, especially in trade and services, have become increasingly important for women. At the same time, the migration of men has given them additional responsibilities.

The changing trajectories of livelihood strategies as seen from the perspective of women belonging to different cohorts in the three studied communities show the complexity of gender relations and their change in relation to: women's participation in economic activities; income earning; and women's roles as managers of the household when men are absent.

In our research, we focused on economic strategies and occupations and on how work for income was affecting gender relations within the household and community. We found that the local context was important in explaining changes related to the situation of women. Basic infrastructure and services have eased the burden of women's domestic work, women have fewer children, and the drudgery of providing food and undertaking daily chores are a thing of the past. Access to public health services and schooling have notably changed the quality of life for people in general, but women in particular, who have access to birth control, physical check-ups and medical attention for their children.

Public policy of rural development has been the main factor in providing an improved context for rural populations. In the 1970s, basic services such as health and education, electrification and roads were widely extended to rural populations, especially in central Mexico. Up to the mid-1980s, rural development was also based on government support to agriculture and small farmers, particularly by making green-revolution technology available through public credit, technical assistance and marketing services.

But even in regions that have undergone profound economic and social changes, as in the case studies reported, gender relations are still anchored to traditional gender roles despite women being income earners or in charge of the family and household economy. And, domestic work and caring for the family remains women's domain. A male-dominated gender ideology prevails as part of the social norms and inhibits the empowerment of women. Women are aware of the prevailing *macho* ideology but are ambivalent about confronting it. Their ambivalence is mediated by their roles as 'mothers' rather than by their awareness that submitting to this role feeds into gender subordination. Only few women, with better education and technical or professional jobs, have openly challenged their situation and are empowered as individuals.

The younger generations face challenges that are very different from those of their elders. Young women have more resources than their mothers – and certainly grandmothers – to confront male dominance in their individual daily life and also in the community. Women today recognize and question male dominance and are aware of their own capabilities and limitations. But they are still not empowered.

In the paper, the importance of public development programmes has been emphasized as drivers of the improvement of livelihoods in central rural Mexico. Neoliberal policies continued the social programmes but abandoned economic and productive investment in small-farm maize-producing regions. Agrarian communities have a precarious productive base, not only in the case of agriculture but also in non-agricultural activities such as agro-industry or even manufacturing. Hence, rural economies are limited to petty trade and services responding to the consumer demands of the low-income populations. Communities are becoming residential sites with informal economies; this is certainly not a sound basis for sustained local or regional growth. The main challenge is a revision of development policies and the role of the state, not only in rural infrastructure and services or poverty alleviation schemes, but with productive projects and particularly agricultural development, in order to activate local and regional markets.

In an overall context of poverty, economic uncertainty, fragmented families and communities due to migration, precarious jobs and, in general, a lack of opportunity in localities that lack economic drivers, a change in gender relations has to be mediated through the empowerment of both men and women in rural society.

Annex 1

Period	EPG Population: 3 076 Municipio: San Felipe del Progreso, State of Mexico	Boye Population: 1 742 Municipio: Cadereyta State: Querétaro	BH Population: 735 Municipio: Tlaltizapan State: Morelos
Agrarian reform and land distribution	<i>Ejido</i> founded 1936 Food staples: (maize), wheat Livestock Non-farm male migration to regional and urban construction works	<i>Ejido</i> founded in 1920s Food staples: (maize), barley Livestock Recollection and production of <i>pulque</i> (an alcoholic beverage made from the sap of an agave cactus) Non-farm male: mule transport, workers in regional public infrastructure works Female: domestic employment in Cadereyta	<i>Ejido</i> founded in 1937 Food staples: (maize), cotton, raising draught animals Non-farm male: recollection of fuelwood Wage workers in nearby farms in horticulture
Development with state intervention, 1970-1990	Maize sold to government agency Subsistence Non-farm male: petty commerce in regional cities Female: domestic employment in Mexico City Rural teachers Public programmes: bilingual education; financing and support prices for maize; pig-raising programme	Food staples for subsistence Non-farm male: work in regional infrastructure works. Migration to USA Female: workers in <i>maquila</i> factory in Cadereyta Public programmes: improved seed for agriculture; electrification of rural regions.	Maize for subsistence. Sorghum for market; Livestock Non-farm male: agricultural wage workers in region: horticulture and sugar cane Migration to USA Female: domestic employment in nearby towns Public programmes: financing sorghum, livestock
Neoliberal policies 1990-present	Fragmentation of land for inheritance Maize for subsistence Non-farm male: construction and petty commerce in central and north Mexico Female: rural teachers; self-employment in commerce and services Public programmes: <i>Oportunidades, Procampo</i>	Maize and horticulture for subsistence Livestock Non-farm male: migration to USA Female (young): employment in commerce nearby town Public programmes: <i>Oportunidades, Procampo</i> , Genetic improvement of livestock	Incipient land transactions for residential purposes Decrease of maize for subsistence Sorghum and livestock Non-farm male: construction, migration to USA Female: local <i>maquila</i> , domestic employment in regional vacation homes, start to migrate to USA

Annex 2. Methodology

The data collected in each community is based on quantitative and qualitative research:

- Household surveys were carried out in the three communities during the spring of 2003 with the purpose of capturing the socio-economic characteristics of the household, agricultural activities, non-agricultural activities and participation in local institutions. A total of 20 percent of households were randomly surveyed in each community (a total of 254 households).
- In-depth interviews were conducted with women of two cohorts in order to capture the experience of women (60 years old and above) who in their adult lives had experienced the 'before' and development era with the presence of the State in *ejido* agriculture (1970s- 1980s) and women (from 35-45 years old) who as adults had experienced the change from state-supported 'development' to neoliberal policies. The interviews enabled the livelihood strategies of their households and the individual trajectories of the women to be reconstructed.
- Focus groups were held in each community in order to discuss issues related to the role of women as income earners, responsibilities as spouses of migrants and participation in the community organizations, and how the women perceived changes in gender relations. Women around 35-45 years of age and young married women from 25 to 35 participated in the focus groups. Hence, the focus groups included young women who had entered adult life under neoliberalism.

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Gender wage gaps in rural versus urban areas

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Introduction

In this paper, we provide estimates of the gender wage gap and its determinants for 14 developing and transition economies from around the globe, which collectively represent roughly 11 percent of the world's population. We use one version of the well-known Oaxaca-Blinder decomposition technique (Oaxaca, 1973; Blinder, 1973) to allocate the observed difference in average wages between men and women into an “explained” component (which captures gender differences in human capital and job characteristics) and an “unexplained” component (which captures gender differences in the rate of reward to these characteristics, including the characteristic of gender itself, and which is often loosely identified with wage discrimination). We begin with the question of whether the unexplained male wage premium is systematically higher or lower in rural areas, a question which to our knowledge has not previously been addressed in a multi-country study. We also look at the relation between the gender wage gap and national per capita income, the dispersion of wages around their conditional means, and the degree of occupational segregation by gender.

Our findings and their policy implications may be summarized as follows. First, despite there being various *a priori* arguments, reviewed below, as to why rural and urban gender gaps might differ, we find only a few examples of differences of this kind. The raw (unadjusted, observed) male wage premium was significantly higher in urban than rural areas in three of our 14 countries, and lower in one. After netting out the explained component, there was a statistically significant difference between urban and rural gender wage differentials in just one country. In short, rural wages do not appear to display any greater pro-male bias than do urban wages, which may be encouraging for advocates of increased women's wage-labour employment in rural areas, although these unexplained gaps are still non-trivial, averaging about 25 percent in our sample.

Second, we find a negative relation between both the explained and unexplained portions of the male wage premium and the national level of development (gross domestic product (GDP) per capita, at international purchasing power parity prices). This suggests that economic growth tends to bring convergence between male and female wages. Third, we find some support for the argument that the unexplained component of the male

wage premium depends positively on the level of occupational segregation, a connection emphasized by sociologists (Reskin and Bielby, 2005). In other words, countries and areas in which men and women are found in very different occupations are those for which unexplained wage gaps are largest. Lastly, we find evidence of a relationship between the unexplained gender wage gap and the overall level of unexplained wage inequality. This suggests that where labour market institutions work to reduce overall wage inequality, for example, via minimum wages or the effects of unionization, the unexplained gap between male and female wages is also reduced.

In considering these conclusions, we must be clear about what the various components of the wage gap do and do not measure. The raw (or observed, unadjusted) male wage premium does not measure wage discrimination *per se*, but rather quantifies the wage deficit that women face, given their current patterns of employment and wages, and their current opportunities to acquire formal education and labour market skills. The gap is the result of many social and economic factors; outright wage discrimination aside, we might expect the raw wage gap to be larger in rural areas, if these are characterized by greater educational gaps between men and women, or if rural women workers have less labour market experience in relation to men than have their urban counterparts. On the other hand, higher-paid jobs in manufacturing, in the public sector, and in unionized industries are more often found in urban areas; if these are disproportionately male, then we might expect to see larger gender wage gaps in the cities than in the country side. We can test these contrary hypotheses by first examining the raw wage gap in rural and urban areas; then estimating the gap that remains after adjusting for education and labour market skills; and finally by adding controls for occupation, industry and public-sector employment. Both the degree to which the unexplained component of the gap is reduced, and the factors that explain that reduction, can tell us whether skills deficits or industrial/occupational segregation are the more relevant factors explaining women's lower earnings.

The policy conclusions of these two conclusions are clearly different: if educational deficits loom large, then better access to education for women and girls is of course the remedy, whereas if the segregation of even educated women into low-paying occupations and industries is largely to blame, then changes in social norms, and/or the enforcement of non-discrimination in hiring are required, so that women can gain a foothold in the traditionally male sectors. Another option is to pursue comparable-worth policies that dictate equal pay for men and women, not for identical jobs, but rather for jobs with similar skill demands (England, 1992, Gundersib, 1994).

The remaining unexplained wage gap, after controlling for human capital as well as occupation, industry, regional differences and other factors, is often used as a measure of pure wage discrimination, and indeed the goal of most of the literature in this field is to test for discrimination of this kind: do men and women with identical skills doing identical work, in the same setting, receive different wages? To study this question properly one needs finely detailed data, which are rarely available in developing countries, so that one can be sure that the men and women are in fact doing the exact same job, and in the same establishment.³⁸ One study of four US cities finds no significant evidence of such "side by side" wage discrimination (Hertz, Tilly, and Massagli, 2001), while another, using a far larger dataset, finds that roughly half of the male wage premium persists even

38 Note that this approach does not address the question of whether men and women are doing different jobs of comparable worth.

when comparing men and women in the same finely detailed occupational categories, and working in the same establishments (Bayard, *et al.*, 2003). This is suggestive of pure sex discrimination in wage-setting, yet to reach this evidentiary standard is beyond of the power of our data.

We may note, however, that such legal sanctions against sex discrimination as exist in developing countries are more likely to be enforced in urban than rural areas. Rural areas might also differ from cities in the extent to which women are confined by custom to low-paying occupations and industries, and in the amount of *overall* wage inequality that is observed. The latter factor is important for the following reason, laid out by Blau and Kahn (2003). If wage-setting norms and institutions (such as unions or public-sector pay scales) compress the overall income distribution, even if by mechanisms that are not sex-specific, this will tend to reduce the gap in average wages between higher- and lower-paid groups. Given that such institutions are likely to be more prevalent in urban than rural areas, we should expect smaller unexplained male wage premiums in the cities.

1. Data

The countries studied are drawn from the Rural Income Generating Activities (RIGA) family of surveys, which builds primarily on World Bank-sponsored Living Standards Measurement Surveys (LSMS).³⁹ Some 25 such surveys have been standardized to facilitate comparative cross-country analysis at the household level, and have been used for such purposes as studying the role of access to agricultural assets and institutions in determining farming outcomes (Zezza, *et al.*, 2008b) and estimating the impact on poverty of the recent spike in food prices (Zezza, *et al.*, 2008a). This paper draws on a subset of 14 countries, listed in Table 1 and referred to as the RIGA-L datasets, for which the individual-level labour market data have been rigorously cleaned and coded for comparability, as described by Quiñones, *et al.* (2008). All analyses are conducted at the level of the person: when people report having more than one job, the main job held in the most recent period is chosen.⁴⁰ Our sample is limited to those between the ages of 15 and 60 for whom earnings data and all other required covariates are available. Note that our data on paid farm employment do not include agricultural self-employment, despite its importance as a source of rural income. This is because the implicit wages associated with family farming are impossible to calculate at the individual level without more detailed data on time use than is generally available.

For our primary analysis, log wages are measured per day, rather than per hour, because hours of work were not always reliably available. Results for the subset of nine of our 14 countries for which hourly wages were calculable were qualitatively similar. It is also worth mentioning that the distinction between “urban” and “rural” is made according to criteria deemed relevant by the local survey team. We defer to these judgments and make no attempt to standardize the definition of rurality across the 14 surveys.

Table 1 lists the countries in each of four regions, the survey year (which ranges between 1995 and 2005), and per capita GDP, at 2005 international purchasing power parity-

39 Two of the surveys incorporated in this analysis are not from the LSMS collection: these are for Indonesia (undertaken by the Rand Corporation) and Bangladesh (undertaken by the Bangladesh Bureau of Statistics).

40 This results in dropping an average of 6 percent of all reported jobs (high 14.3 percent in Ecuador and low 0 percent in Tajikistan). These are secondary and tertiary jobs, which are generally of shorter duration and hence of less importance in terms of income.

adjusted dollar prices (World Bank, 2009). Following this are the numbers of employed women and men in rural and urban areas: sample sizes for these subgroups range from a low of 111 (rural women in Albania) to a maximum of 5 470 (rural men in Malawi).

2. Estimating the gender wage gap

The raw, or unadjusted, male wage premium is simply the difference in observed mean log wages⁴¹ between men and women, calculated separately for rural and urban areas. This is estimated using survey sampling weights, if such exist, so as to recreate representative population means. Standard errors here and elsewhere are calculated to be (asymptotically) robust to heteroskedasticity, and to clustering at the household level, to account for the likely positive correlation in unobserved factors between men and women in the same family.

These wage gaps can then be modelled in a variety of ways. We implement one of many possible versions of the Oaxaca-Blinder equation (Oaxaca, 1973; Blinder, 1973), decomposing the difference in mean log wages for men (\bar{W}_m) and women (\bar{W}_f) as follows, with separate equations for rural and urban areas:

$$[1] \quad \bar{W}_m - \bar{W}_f \equiv \bar{Z}_m \beta_m - \bar{Z}_f \beta_f \equiv (\bar{Z}_m - \bar{Z}_f) \beta^* + \bar{Z}_m (\beta_m - \beta^*) - \bar{Z}_f (\beta_f - \beta^*).$$

Here $\beta_{m,f}$ are the estimated coefficients from linear regressions of log wages against a set of predictors ($Z_{m,f}$, described below) for men and women separately, while β^* is an estimate of the unobserved parameter vector that would obtain in the absence of wage discrimination. Thus the first term on the right, $(\bar{Z}_m - \bar{Z}_f) \beta^*$, measures that share of the male-female gap in mean log wages that is due to differences in their mean productive attributes (Z), evaluated at non-discriminatory “prices” or rates of return to each attribute. This is commonly called the “explained,” or non-discriminatory, portion of the wage gap, although it will of course contain the effects of any pre-labour-market forms of discrimination, such as barriers to girls’ education. If Z includes occupational variables, this term will also capture the effects of occupational segregation that limits women to low-paid types of work.

The second two terms reflect the unexplained portion of the wage gap, which is due to differences in the coefficients that apply to male versus female attributes (including the difference in the male and female intercepts). Each of these is expressed as a deviation from the hypothetical non-discriminatory wage structure, so that in principle one can determine both the extent to which men are overpaid, and the amount by which women are underpaid.

There are at least five main problems with this approach, all well-recognized in the literature.⁴² First is the fact that the equation ignores pre-labour-market forms of discrimination, such as in access to schooling. As a result, these wage gap estimates

41 Differences in log wages can be interpreted as percentage differences. They have the advantage of symmetry: we can state that the gap between men and women is 20 percent (0.20 in logs) without specifying whether this is the percentage by which men’s wages exceed women’s, or the percentage by which women’s fall short of men’s. For large differences, however, this symmetry can be misleading: a gap of 0.50 in logs implies that men earn 65 percent (not 50 percent) more than women, or, equivalently, that women earn 39 percent less than men. Another subtlety is that the “mean log wage” is not the log of the arithmetic mean wage, but rather the log of the geometric mean wage.

42 Other problems, which have been addressed in the literature (Nopo, 2008) but which we do not address here, include the fact that this decomposition looks only at means, whereas gender differences may vary across the wage distribution, and that the linear model makes out-of-support estimates of counterfactual wages (i.e. predicts wages for people with combinations of attributes that are not actually found in the data.)

should not be viewed as measuring the full array of economic disadvantages that women face. Second is the problem of occupational segregation: if one omits occupational controls one likely exaggerates the degree of wage discrimination *per se*, whereas if one includes them, one may overstate wage discrimination by conflating it with occupational segregation, or discrimination in hiring. This latter problem cannot be solved in any simple way, but the *comparison* of the two specifications is informative. As described below, we will present results from a “basic” specification and compare them with results from an “extended” model that adds occupation, industry and public-sector controls.

Third is a problem of measurement: there are many dimensions of human capital along which men and women may differ, but which are not fully captured in standard surveys. Chief among these is labour market experience: it is well known that the loss of both job tenure and total work experience for parents, usually women, who exit, or defer entry into, the paid labour market in order to raise their children explains a portion of their lower earnings. Underestimates of the male-female work experience gap will lead to overestimates of the male-female unexplained wage gap. Without a complete work history, which few surveys collect, work experience cannot be measured accurately; a proxy is to use information on the lifetime fertility of women (assuming this is exogenous to their potential wages, which is a strong assumption), but such information is also usually not available. Instead, we rely on a count of the number of people resident in the household who are of a younger generation than the woman in question. Our assumption is that each of these sons, daughters or grandchildren may at some time have been a reason for the woman to be out of the labour market. This enters all of our female wage equations as a measure of lost experience; for men the variable is not used, on the assumption that they lost no work experience due to child rearing.

Fourth, is the problem of estimating β^* , the hypothetical non-discriminatory wage structure, which is used to quantify the effects of differences in productive attributes, Z . Oaxaca (1973) noted that one could use either the male wage structure or the female as the reference (corresponding to $\beta^* = \beta_m$ or $\beta^* = \beta_f$) and that the resulting (often very different) estimates should bound the true result. Cotton (1988) argued that one should use a weighted average of the two sets of coefficients, with the weights being proportional to the group shares in the labour force. The argument is that discrimination involves the simultaneous overpayment of the favoured group and the underpayment of the less-favoured group, and that the scope for this over/under payment is dictated by relative shares in employment. If employment is 90 percent male, then the hypothetical non-discriminatory coefficients would be fairly close to the male results, but possibly quite far from the female numbers.

Neumark (1988) developed a widely used alternative that generally yields much lower estimates of the unexplained (“discriminatory”) component, estimates which may even lie outside of Oaxaca’s two extremes. He posits that employers maximize a utility function which depends not only on profits, and hence on the marginal productivity of labour in each occupation, but also on the ratio of the number of men and women in each type of job. He then demonstrates that under these assumptions the non-discriminatory wage vector, β^* , can be estimated by a linear regression that pools men and women. The problem with this approach is that the model of wage determination – a single homogenous employer who cares only about sex ratios in each occupation – is too simple to serve as a strong theoretical basis for the derivation of the non-discriminatory alternative. Moreover, it often yields counter-intuitive results; namely, that the estimated non-discriminatory rate

of return to a given attribute (say, education) may be higher than the observed rate of return for either men or women. Jann (2008) points out that if discrimination takes the simple form of a difference in the intercepts of the wage equations for men and women, then the pooled equation will yield upwardly biased estimates of the returns to any productive attribute (such as education) which is positively associated with wages, and in which men have the advantage.⁴³

Jann then suggests that Neumark's pooled equation be augmented by including a gender indicator variable. As it happens, the coefficient on this variable is mechanically equal to the unexplained component that arises from adopting this approach for estimating β^* . In other words, this version of the Oaxaca decomposition yields the same estimate of the "total unexplained gender effect" as a simple pooled linear regression with a gender dummy variable; however, it retains the advantage of making explicit the share of the wage gap that can be explained by each attribute. This is the approach we use, using the algorithms developed by Jann (2008), and we note that it tends to produce results that are quite similar to the results of Cotton's method, but often significantly different from those of the two more common alternatives (using the male coefficients, or using Neumark's pooled regression results, as the reference wage structure).

In our basic specification (Model 1, in Table III- 2), we include controls for age (entered as a quadratic), years of formal education, marital status, minority ethnic or religious group membership, full versus part-time status, geographic region (usually consisting of a dozen or more district indicators, depending on the country), whether the job in question was a current job or a job held at some point in the past, and our proxy for women's lost labour market experience, discussed above. Our extended Model 2 adds a set of control variables for broad occupation (divided into ten categories), industry (seven categories), and an indicator for public-sector employment.

Sample selection bias is the fifth problem with the Oaxaca decomposition technique. The issue here is that wage discrimination may be better measured not by differences in observed wages, but by differences in wage *offers*; however, these offers will not be observed if the person in question is not working. This could bias estimates of the wage gap that are based only on observed workers, a point that has been made clearly in the case of black-white wage gaps in the United States (Brown, 1984, Neal, 2004) and is also at the heart of concerns about measurement of women's wages that motivated Gronau (1974), and led to the selection-bias-correction model of Heckman (1979).

Unfortunately, the cure is more challenging than the diagnosis. Deaton (1997) notes several difficulties with the Heckman model, which is the usual prescription, and recommends against its use unless selection mechanisms are clear, and all of the model's econometric assumptions are likely to be met, advice which is routinely ignored in much empirical work on this topic.⁴⁴ In an extended version of our analysis, available from the corresponding author, we investigated a number of Heckman specifications, and our results seem only to confirm Deaton's scepticism about the model's practical feasibility, rather than to shed any additional light on the question at hand.

43 Neumark recognized this result, but did not consider it to be a fatal flaw. Our objection is that the assumption that wages are set in a market characterized by a single representative employer, whose preferences depend only on occupational sex ratios, is unrealistic, and that its econometric implications are sufficiently counter-intuitive to warrant scepticism about this approach.

44 See also the discussion in Greene (2003, p. 789).

3. Results

In Table III- 1 we see that, as expected, wage-employment-to-population rates are lower for women than men in nearly all countries, with the exception of Bulgaria. Urban participation rates are, on average, somewhat higher than in rural areas, although not in all countries. Rural levels of education are uniformly lower than in urban areas, but men's and women's education levels are roughly comparable on average: in Latin America women have higher levels of schooling than men, offsetting women's education deficit in most other countries. Male and female shares in agriculture (that is, paid labour in farming), which is a low-wage sector, are also not dissimilar on average.

Table III- 2 presents the raw wage gaps and the Oaxaca decompositions according to our basic Model 1, and our extended Model 2 (i.e. adding occupation, industry and public-sector controls). As expected, male wages are higher than female in both urban and rural areas, in all cases except rural Panama, where women have a significant advantage. (All raw gender wage gaps are significantly different from zero at the 5 percent level or better, except in rural Bulgaria.) However, we see only weak evidence of a pattern in comparing rural and urban wage gaps: the gender gap is larger by a statistically significant margin in urban than rural areas for three countries (Bangladesh, Nepal and Panama, in bold), while the rural gender gap is larger in Tajikistan. On average for the 14 countries, the urban male wage premium is just five percentage points larger than its rural counterpart, and this difference is not significant in statistical terms.

The next columns list the "unexplained" component of the wage gap, according to the basic model. On average this accounted for about 71-72 percent of the total, in both urban and rural areas. In some cases, most notably in Nicaragua and Panama, the unexplained gap was *larger* than the raw male wage premium, indicating that women's attributes predict that they should earn more, not less, than men; this is driven primarily by their higher levels of education, documented in Table III- 1. In three cases (Bulgaria, Nepal and Panama) the unexplained wage gap was significantly larger (favouring men) in urban areas. However, once occupation, industry and public-sector controls are added, only Nepal remains on this list. In Malawi, the male wage advantage was higher in rural areas, but this difference again fades into insignificance in the extended specification of Model 2.

Perhaps the most striking fact of this table is that the addition of the occupation, industry and public-sector controls makes almost no difference to the overall level of the unexplained component, rarely altering it by more than a few percentage points. The reason can be seen in the detailed Oaxaca decomposition results for each country (available from the authors on request). First, the public sector, industry and occupation variables sometimes make *negative* contributions to the explainable male wage premium, implying that at this broad level of aggregation, occupation and industry distributions favour women. Second, where they do make a significant positive contribution, this often comes at the expense of the estimated effect of education or other variables, leaving the total explained component (and hence the total unexplained component) more or less unchanged. This suggests that if industries and occupations are broadly defined as they are here, then industrial/occupational segregation is not driving the male wage premium. As we shall see below, however, at a finer level of disaggregation, we do find some evidence that occupational segregation works against women.

The results in Table III- 2 represent 28 estimates of the unadjusted gender wage gap, and its explained and unexplained components. In Table III- 3, we perform a secondary analysis of these three outcomes, regressing them against an urban dummy variable, as well as national per capita GDP measured at international purchasing power parity dollars (in thousands) at 2005 prices, and a measure of occupational segregation developed by Duncan and Duncan (1955), and given by the following:

$$[2] D = \sum_i |(F_i/F) - (M_i/M)|/2$$

where i ranges over all non-empty occupation X industry cells, F_i is the number of female workers in that cell, F the total number of employed women, and analogously for M_i/M . To see how the index works, note that if all types of jobs were perfectly segregated, so that each was either 100 percent male or 100 percent female, then for any given i either F_i/F or M_i/M would be zero, and the summation would evaluate to 2 overall, meaning $D=1$. At the other extreme, if men and women were represented in each job in proportion to their shares in the workforce, the interior of the summation would always be zero, so $D=0$. In our dataset, D varied between 0.19 (rural Nigeria) and 0.69 (rural Panama), and there was no relation between rurality and occupational segregation. Note that although we have already controlled for occupation and industry in our extended regressions, this measure of occupational segregation is not redundant, since it is defined over the interaction of occupation and industry, which generates a more finely disaggregated list of job types.

In these regressions we also control for the variance of the residuals from the pooled male/female wage equation, i.e. the same wage equation that is used to generate β^* . These residuals measure the dispersion of observed wages that cannot be explained by the pooled model, which includes a gender dummy: hence the residuals are uncorrelated with gender by construction. In all regressions we use weighted least squares to account for the fact that the outcomes are themselves based on regression parameter-estimates, and, as such, come with estimates of their variances which we can use to correct for their heteroskedasticity.

In the first column of Table III- 3 we examine the predictors of the unadjusted male wage premium. No significant rural/urban difference is found (nor is there any significant difference in their simple means without the other covariates). There is, however, a negative relationship between the unadjusted male wage premium and national per capita income (which is also plotted in Figure 1). The coefficients imply that an increase in income of US\$1 000 PPP dollars at 2005 prices (roughly the difference between Bulgaria and Panama, or between Nigeria and Indonesia) corresponds to a four percentage-point reduction in the male premium. This is driven by a simultaneous decrease of about three percentage points in the explainable portion of the wage gap (in column [2]) and a one percentage point decrease in the unexplained portion (column [3]). Neither the Duncan segregation index nor the residual variance term appear as significant predictors in the first two columns, but when we model the determinants of the unexplained component, the residual variance term emerges as a positive predictor: more overall wage dispersion, after controlling for all covariates *including gender*, corresponds to a greater unexplainable gap between male and female wages.

In columns [4] through [7], we include the raw (unadjusted) wage gap as a predictor of the unexplained (“discriminatory”) component. This allows us to ask whether the size of the unexplained gap *relative* to the overall gap depends on any of our predictors. We see in column [4] that the per capita GDP effect is eliminated. In columns [5]-[7] we drop

the insignificant variables (first urban, then per capita GDP, then both), yielding models with higher adjusted R-squareds, and improved information measures (AIC). In two of these three models, the Duncan index emerges as a positive predictor, providing some support for the argument that occupational segregation does explain a portion of the “discriminatory” component of the wage gap.⁴⁵ In all specifications, the residual variance measure retains its significance.

4. Discussion

In a thoughtful review of the gender-wage-decomposition literature, Grimshaw and Rubery (2002, Page 3) make the point that:

While standard decomposition approaches seek to provide a simple overview of the factors shaping the gender pay gap in a particular country, in fact they may obscure more than they reveal because they are unable to incorporate the complexity of institutional and other societal-specific factors in the shaping of the wage structure.

With this caveat in mind, let us see what we can plausibly claim to have learned from this exercise.

First, it is worth pointing out the countries and areas for which the observed (unadjusted) pay gaps are largest. Taking 0.4 as an arbitrary threshold, these would include Bangladesh (rural and urban), Ghana (rural), Indonesia (rural), Nepal (rural and urban) and Tajikistan (rural and urban).

Second, despite the imperfect nature of the unexplained wage gap as a measure of discrimination, it is still worth highlighting those countries for which large wage gaps can not readily be explained away. Urban Bangladesh and Nepal again stand out, but so too do several countries in which the *unexplained* gap is noticeably larger than the raw wage gap, implying that women earn lower wages *despite* having better productive attributes or working in more lucrative industries and occupations. These include rural Nigeria and rural Panama, and, to a lesser extent, Bulgaria and Nicaragua. Results such as these may provide policy ammunition to advocates for women’s economic equality in those countries.

Third, as regards the question that motivated our analysis, although we find no systematic rural/urban differences, we do find some significant differences between urban and rural gender wage differentials in some countries. Here, however, the warnings of Grimshaw and Rubery seem on target: interpreting these differences, and their implications for policy, requires a deeper country-specific understanding of the forces at work.

Fourth, the cross-country analysis in Table III-3 has the strength of being based on comparably derived estimates, but the weakness of its small sample size. The finding that occupational segregation does matter for wages is perhaps not surprising, but it is important to observe that it is not a simple matter of, say, women working in agriculture and men working in industry. As in the higher-income countries, occupational segregation occurs at a more disaggregated level, and when it occurs, it widens the gender pay gap. Similarly,

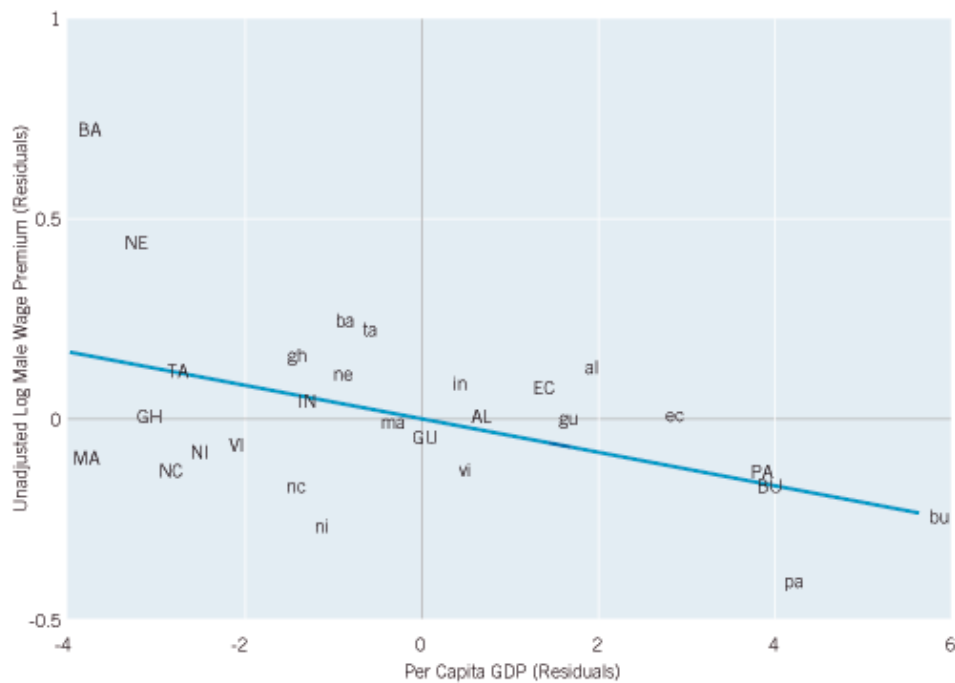
⁴⁵ We noted, however, that when ordinary least squares were used, rather than weighted least squares, both the size and the statistical significance of the Duncan Dissimilarity Index are reduced.

we are able to extend one of the findings in Blau and Kahn (2003) to the developing world – namely, that wage compression reduces gender wage disparity. This may occur because of institutions such as minimum wages and collective bargaining, which, by raising the lowest wages the most, have the effect of also reducing gender inequality in the workplace.

Finally, the negative relationship between the male wage premium and the level of development echoes a finding in Zweimüller, Winter-Ebmer and Weichselbaumer (2008), whose work is a meta-analysis of 1 440 country-year estimates of the unexplained male wage gap. It is an encouraging finding, but should not be interpreted to imply that male and female wages necessarily, and automatically, converge as economic growth advances.

GRAPH III-2

Unadjusted male log wage premium and per capita GDP



Notes: Based on regression results from Table 3, column 1, plotting residuals after removing effects of other covariates. Uppercase letters are urban estimates, lowercase are rural, and the first two letters of the country are used, except that “nc” is Nicaragua (“ni” is Nigeria).

TABLE III-1
Descriptive Statistics

Region & Country	Year	Per Capita GDP \$PPP 2005 prices	Number Employed (Unweighted)			
			Rural		Urban	
			F	M	F	M
Africa						
Ghana	1998	982	229	496	221	558
Malawi	2004	650	3493	5470	390	995
Nigeria	2004	1682	430	1238	368	861
Asia						
Bangladesh	2000	901	433	3429	463	1744
Indonesia	2000	2724	1068	2336	1695	3010
Nepal	2003	926	957	1646	312	749
Vietnam	1998	1448	1332	1921	848	1095
Latin America						
Ecuador	1995	5658	553	1773	1480	2254
Guatemala	2000	3966	850	3080	1596	2566
Nicaragua	2001	2145	413	1351	1138	1750
Panama	2003	8267	642	1997	1745	2313
Eastern Bloc						
Albania	2005	5463	111	559	692	1017
Bulgaria	2001	7348	311	319	1078	965
Tajikistan	2003	1283	1314	1897	473	735
Averages		3103	867	1965	893	1472

Note: Unless otherwise indicated, all figures are weighted using the survey's expansion weights. The Bulgarian survey is self-weighting.

	Share of Population Ages 15-60				Years of Schooling				Share in Agriculture			
	Rural		Urban		Rural		Urban		Rural		Urban	
	F	M	F	M	F	M	F	M	F	M	F	M
	0.058	0.143	0.094	0.272	5.2	7.9	8.8	8.8	0.074	0.192	0.027	0.070
	0.313	0.516	0.239	0.514	2.6	3.1	6.3	6.0	0.881	0.741	0.370	0.261
	0.026	0.077	0.077	0.179	5.8	5.3	7.1	6.3	0.275	0.285	0.031	0.037
	0.062	0.483	0.132	0.461	1.9	2.8	3.2	5.5	0.406	0.549	0.022	0.065
	0.166	0.375	0.238	0.455	7.0	8.8	12.2	12.7	0.443	0.358	0.056	0.086
	0.232	0.481	0.173	0.441	1.2	3.5	6.0	8.3	0.909	0.544	0.308	0.099
	0.213	0.346	0.316	0.468	6.1	6.9	9.6	9.8	0.497	0.393	0.024	0.042
	0.181	0.563	0.326	0.595	6.4	5.9	10.8	10.0	0.361	0.577	0.028	0.082
	0.152	0.638	0.374	0.659	3.5	3.5	7.9	7.7	0.338	0.594	0.041	0.118
	0.173	0.518	0.311	0.593	5.2	3.6	9.0	7.3	0.186	0.596	0.026	0.157
	0.212	0.562	0.430	0.597	10.1	7.3	12.4	11.4	0.066	0.508	0.008	0.042
	0.050	0.234	0.243	0.385	11.6	9.9	12.3	11.7	0.052	0.153	0.010	0.025
	0.468	0.472	0.639	0.604	9.9	10.3	12.2	12.2	0.215	0.235	0.013	0.018
	0.274	0.426	0.195	0.364	9.9	11.0	12.0	12.2	0.831	0.675	0.152	0.122
	0.184	0.417	0.270	0.471	6.2	6.4	9.3	9.3	0.395	0.457	0.080	0.088

TABLE III-2

Summary of Results of Oaxaca-Blinder Decompositions

Region & Country	Male Wage Advantage			Unexplained Male Wage Advantage (Model 1)			Unexplained Male Wage Advantage (Model 2)		
	Rural	Urban	<i>Signif. Diff.?</i> <i>P</i>	Rural	Urban	<i>Signif. Diff.?</i> <i>P</i>	Rural	Urban	<i>Signif. Diff.?</i> <i>P</i>
Africa									
Ghana	0.470	0.293	0.112	0.235	0.238	0.985	0.226	0.221	0.973
Malawi	0.334	0.225	0.124	0.163	-0.068	0.018	0.192	0.072	0.199
Nigeria	0.188	0.287	0.402	0.217	0.134	0.605	0.321	0.172	0.322
Asia									
Bangladesh	0.530	0.978	0.000	0.356	0.439	0.310	0.351	0.403	0.510
Indonesia	0.427	0.352	0.151	0.312	0.239	0.248	0.358	0.276	0.194
Nepal	0.402	0.722	0.000	0.168	0.615	0.000	0.170	0.563	0.000
Vietnam	0.181	0.213	0.371	0.190	0.181	0.825	0.149	0.141	0.835
Latin America									
Ecuador	0.319	0.365	0.493	0.283	0.326	0.665	0.304	0.289	0.891
Guatemala	0.295	0.244	0.372	0.222	0.135	0.164	0.279	0.173	0.106
Nicaragua	0.081	0.126	0.373	0.129	0.182	0.442	0.148	0.182	0.652
Panama	-0.145	0.135	0.000	-0.005	0.163	0.010	0.090	0.171	0.256
Eastern Bloc									
Albania	0.390	0.275	0.153	0.321	0.260	0.599	0.188	0.228	0.742
Bulgaria	0.068	0.147	0.138	0.056	0.151	0.095	0.102	0.143	0.506
Tajikistan	0.588	0.452	0.052	0.323	0.427	0.325	0.255	0.386	0.213
Simple Averages	0.295	0.344	0.561	0.212	0.244	0.545	0.224	0.244	0.631

TABLE III-3
Secondary Analyses (N=28 Urban and Rural Estimates)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Unadjusted Gap	Explained Gap (Model 2)	Unexplained Gap (Model 2)				
Urban	0.065 (0.071)	0.033 (0.048)	0.027 (0.033)	0.002 (0.022)		0.007 (0.020)	
Per capita GDP (\$1000s)	-0.042*** (0.014)	-0.028*** (0.009)	-0.012* (0.006)	0.003 (0.005)	0.003 (0.004)		
Duncan Dissimilarity Index	0.089 (0.271)	-0.022 (0.194)	0.197 (0.137)	0.129 (0.087)	0.131 (0.084)	0.147* (0.081)	0.157** (0.075)
Residual Variance	0.165 (0.180)	0.035 (0.123)	0.166* (0.086)	0.100* (0.056)	0.100* (0.054)	0.106* (0.054)	0.109** (0.053)
Unadjusted Gap				0.369*** (0.062)	0.370*** (0.060)	0.348*** (0.052)	0.348*** (0.051)
Constant	0.290** (0.128)	0.142 (0.086)	0.094 (0.061)	0.004 (0.042)	0.004 (0.040)	0.008 (0.041)	0.007 (0.040)
Adjusted R-squared	0.179	0.201	0.111	0.644	0.659	0.653	0.665
AIC	-17.0	-40.6	-58.9	-83.7	-85.7	-85.2	-87.1

Standard errors in parentheses, calculated using weighted least squares.

*** p<0.01. ** p<0.05. * p<0.1

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Are African high-value horticulture supply chains bearers of gender inequality?

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Introduction

During the past decades, many developing countries have experienced rapid change in their agri-food systems, with increased integration in international markets and rapid expansion of modern food-supply chains (Swinnen, 2007). These modern supply chains comprise the production and trade of high-value produce, usually destined for export to high-income markets or for supermarket retail in high-income urban market segments. Modern supply chains are expanding rapidly across developing regions as global trade in high-value non-traditional agricultural products – such as fresh food and vegetables, fish and seafood products – is increasing sharply and increasingly originating from developing countries⁴⁶ (Aksoy and Beghin, 2005) and as supermarkets are spreading rapidly across developing countries and regions (Reardon *et al.*, 2003). The governance of modern supply chains is characterized by the use of high standards to govern quality and food safety throughout the chains, high levels of vertical coordination – including contract farming – in the chains, and a high degree of consolidation of the supply base and agro-industrial processing, whereas traditional food supply chains in poor countries are governed through spot market transactions involving a large number of small traders.

The emergence and spread of modern food-supply chains in developing countries has given rise to a broad discussion on the overall welfare implications. On the one hand, the expansion of modern supply chains has significant potential for increasing agricultural profits, raising rural incomes and alleviating rural poverty (Swinnen, 2007). On the other hand, modern supply chains have been contemplated to have adverse development effects and exacerbate existing inequalities in rural areas because the poorest farmers are either excluded from the chains or exploited by large, often multinational, companies dominating the chains (Key and Runsten, 1999; Reardon *et al.*, 1999). Empirical studies on these issues have come to diverse conclusions, and the welfare impact of the growth in modern supply chains remains a controversial issue.

However, the emergence of modern supply chains is profoundly changing the way food is produced and traded in developing countries, with important effects for rural households in these countries. As women play an extremely important role in agriculture in poor countries, the modernization of food supply chains entails important gender implications as well. There is a large gap in the literature: the gender effects of high-value agri-food trade and modernization of supply chains remain an almost unexplored issue

⁴⁶ The share of developing countries in total exports of high-value non-traditional commodities (including fruits, vegetables, flowers, fish and seafood products) increased from 21 percent in 1980 to 41 percent in 2000 (Aksoy and Beghin, 2005).

(Fontana *et al.*, 1998). Dolan (2001) points to the fact that women farmers are disadvantaged in contract-farming schemes in the Kenyan horticulture sector. Barrientos, Dolan and Tallontire (2001, 2003) indicate that women farm workers are exploited in the South African deciduous fruit sector. Although these studies give valuable insights into specific gender-related aspects of modern supply chains, there is a need for a more general view on gender implications of modern supply chains and for quantifying the effects.

In this paper, we analyse how women are specifically affected by the emergence and spread of modern supply chains. We conceptualize the various channels through which women are affected. We also collect and discuss existing empirical evidence and add new survey-based evidence from two studies of high-value horticulture supply chains in Senegal in an attempt to quantify specific gender effects. Our focus is mainly, although not exclusively, on high-value horticulture supply chains in sub-Saharan Africa (SSA). This is of particular relevance because horticulture supply chains have been most affected by processes of globalization and modernization and because SSA is the developing region where gender inequality is most pronounced.

The paper is structured as follows: in the next section we develop a conceptual framework and identify several key gender-related issues of modern supply chain growth; in section three we present two original case studies used throughout the paper, including details on primary data collection; in section four we assess the implications of modern supply chains for intra-household allocation of resources and control over income; in section five we discuss the implications of modern supply chains for rural labour markets and, in particular, the feminization of these markets and gender discrimination in these markets; in a final section we summarize our conclusions and identify several unresolved issues and areas for further research.

1. Conceptual framework

The conceptual framework, depicted in Graph III-3, integrates insights on how modern supply chains are governed and how, depending on the governance structure, rural households benefit directly from modern supply chains. The framework enables us to make an adequate assessment of intra-household and gender issues in modern supply chains. It is important to note that, in order to keep the analysis focused, we analyse only the direct effects of modern supply chains and ignore possible spillover effects through indirect and more complex causal linkages.⁴⁷

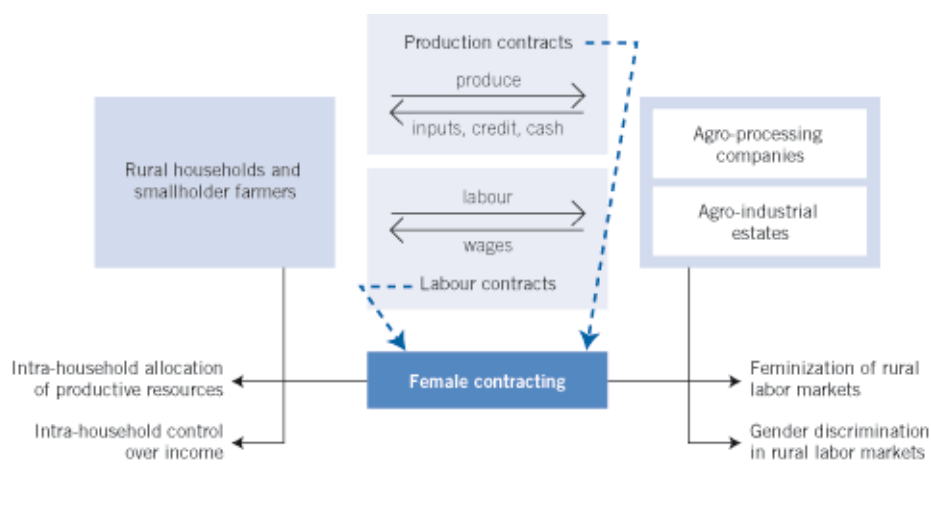
1.1. Supply chain governance

The modernization of food supply chains entails important structural changes. First, modern supply chains, such as fresh fruit and vegetable (FFV) export supply chains and supermarket-driven fresh food chains, are increasingly governed through stringent food standards, both public and private. Second, modern supply chains usually entail a certain degree of consolidation and the involvement of agro-industrial firms or large buyers. Third, rather than being based on spot market transactions, modern supply chains entail

⁴⁷ In our analysis, we focus only on the supply-side effects and ignore direct consumption effects of modern marketing chains. This is a reasonable approach in this first attempt to better understand gender implications of modern supply chains, but one should bear in mind that consumption effects might be important, e.g. by improving access to a wider variety of products (Minten and Reardon, 2008).

GRAPH III-3

Conceptual framework on the direct gender-related effects of modern supply chains



varying levels of vertical coordination at different nodes in the chains. This is most apparent in the form of contract farming between agro-industrial firms or food distributors and primary producers. In the most extreme case, primary production is completely vertically integrated in upstream processing and trading activities. Fourth, vertical coordination in modern supply chains often involves some kind of market interlinking; most commonly the provision of inputs and credit to farmers by food companies in return for supplies of primary produce under contract-farming arrangements (Swinnen and Vandeplass, 2007).

There are large variations in the degree of supply base consolidation, the extent of agro-industrialization, the level of vertical coordination and the occurrence of market interlinking across countries and sectors⁴⁸ (Swinnen and Maertens, 2007). These variations determine how rural households are affected. First, farm households are affected through the production and marketing of high-value produce in contract-farming schemes with agro-industry. Farmers generally gain from participation in such contract-farming schemes through enhanced access to inputs, reduced production and marketing risks, improved technology and productivity, and ultimately higher incomes – which has been empirically demonstrated by various authors (BIRTHAL *et al.*, 2005; GULATI *et al.*, 2007; MINTEN *et al.*, 2009). Second, if high-value supply chains are characterized by large-scale, often vertically integrated estate production, or if labour-intensive post-harvesting and processing are needed – e.g. because of increased requirements for sorting, grading, washing, and labeling – local households gain through employment and labour market effects. Empirical studies have demonstrated that the poorest households benefit especially through such employment effects (Maertens and Swinnen, 2009; Maertens *et al.*, 2008; McCulloch and Ota, 2002; Barron and Rello, 2000).

48 An overview of different governance systems in modern supply chains is given in Dirven (1996) for Latin America and in Swinnen (2005) for Eastern Europe and the former Soviet Union.

1.2. Intra-household and gender issues

There are two channels through which rural households are directly connected to and gain from high-value supply chains: product markets (contract-farming); or labour market (agro-industrial employment). A first important intra-household issue is whether there are gender differences in who is contracted⁴⁹ by the agro-industry, either as part of a production contract or as part of a labour contract. Such gender differences may affect the allocation of productive resources – including land, labour, and capital – in the household and the intra-household control over incomes.

In a unitary household framework, these issues would not matter and the sole question would be the impact on total household income. However, individual household members likely have different preferences and do not necessarily pool resources (Ellis, 1998). It has been observed that income controlled by women has a superior development impact because such income is more likely to be associated with improved child nutrition and increased spending on children's education, health care, etc. (Quisumbing and Mc Clafferty, 2006). Therefore, in a collective household framework, participation of women in modern supply chains and women's control over income derived from them matters, as they could be positively associated with broader development goals.

Second, the growth in modern supply chains has been associated with increased rural employment opportunities, especially where high-value production is organized around large estate farms and where labour-intensive post-harvest handling and processing are required. This raises issues concerning the degree of feminization in these rural labour markets and the existence of gender discrimination. Feminization of labour markets in developing countries is generally perceived as a favourable gender impact, as labour market participation is positively correlated with women's well-being, increased women's economic independence and enhanced empowerment, which are in themselves important objectives of gender equality (Quisumbing, 2003; Zhang *et al.*, 2004). In addition, women's control over income in the household is strongly determined by women's access to labour markets and paid employment (Quisumbing, and Mc Clafferty, 2006).

However, women are generally found to be disadvantaged in rural labour markets. Cultural, social and religious norms often prevent women from taking advantage of off-farm opportunities and working outside the home and the family farm (Lanjouw and Feder, 2001; Haggblade *et al.*, 1988). Women, especially in African rural societies, are more often concentrated in subsistence food crop production, household maintenance activities (such as fetching water and fuelwood), and low-return off-farm economic activities inside the home (such as food processing, pottery and weaving) than in wage labour outside the house (Lanjouw and Lanjouw, 2001; Quisumbing and Mc Clafferty, 2006; Woldehana, 2005). Moreover, even if women are able to participate in rural labour markets, they might be disadvantaged because of gender discrimination in wages and work conditions, as has been empirically documented in some studies (Canagarajah *et al.*, 2001; Lanjouw and Feder, 2001). Feminization and gender discrimination in labour markets have mostly been addressed in urban markets and manufacturing sectors, while insights from rural sectors are very limited (Fontana *et al.*, 1998; Zhang *et al.*, 2004). A focus on modern supply chains and resulting female employment in high-value agro-industrial production and agro-processing might remove this sectoral bias in gender studies.

49 Contracting is defined here in a broad sense and can mean an oral short-term agreement as well as a signed formal contract extending over a longer period of time.

Within the depicted framework, we address a series of gender-related issues such as gender difference in contract farming and agro-industrial employment, feminization of rural labour markets and gender discrimination in these markets.

2. Case studies and data

To empirically document and quantify the gender implications of the spread of modern supply chains, we use insights from two case studies of high-value horticulture export supply chains in Senegal. Horticulture exports from Senegal to the European Union have increased dramatically, from 4 800 tonnes in 1997 to almost 25 000 tonnes in 2006; green beans and cherry tomatoes are the main crops, each accounting for about one-third of total exports (Maertens and Swinnen, 2009). The two studies cover the main horticulture zones and export crops in Senegal: the area “*Les Niayes*” from where over 90 percent of exported beans originate; and the “*Senegal River Delta*” area from where almost the entire volume of tomato exports originates.

We organized extensive primary data collection at different levels of the supply chains. Data include: interviews with horticulture experts, farmers’ organizations and village representatives; quantitative interviews with exporting companies; and a large and comprehensive household survey. Additional information on data collection, sampling design and survey strategy is described in Maertens and Swinnen (2009) and Maertens *et al.* (2008).

The two supply chains differ substantially in certain governance aspects. The tomato supply chain is dominated by one multinational company organizing the complete production and export of cherry tomatoes from the *Senegal River Delta* area. The company – a subsidiary of a French holding company with food production and distribution affiliates in a number of countries in Africa, Europe and Latin America – started investing in horticulture production and trade in Senegal in 2001. The export tomato chain is completely vertically integrated and local smallholder suppliers are completely excluded. The multinational holding company aims at high-standards production and is certified by different schemes including EurepGAP, the British Retail Consortium, the Ethical Trade Initiative and Tesco’s Nature Choice.

Contrarily, the bean supply chain involves several exporting companies in the *Niayes* region and is based partially on smallholder contract farming and partially on vertically integrated agro-industrial production. Companies in this sector increasingly seek compliance with stringent EurepGAP standards. As part of their compliance strategy, some companies started their own integrated estate production. This has caused a profound shift in the governance structure of the bean supply chain, with the share of procurement from local smallholder suppliers decreasing from 95 percent in 1999 to 52 percent in 2005.⁵⁰

50 Similar observations on supply chain restructuring have been made in other studies as well, for example, by Jaffee (2003) for Kenyan vegetable exports, by Minot and Ngigi (2004) for FFV exports from Cote d’Ivoire, and by Danielou and Ravry (2005) for pineapple exports in Ghana. Usually, increasing food standards are mentioned as the main driving forces of these changes.

3. Participation in modern supply chains and intra-household effects

3.1. Women's participation in modern supply chain

3.1.1. Contract farming

Women farmers are mostly excluded from contracting with agro-industrial firms for the delivery of high-value produce, although there are some examples of successful integration of women as contracted parties in contract-farming schemes.⁵¹ For example, Dolan (2001) observes less than 10 percent of women farmers in smallholder contract-farming schemes in the Kenyan FFV export sector, and Eaton and Sheperd (2001) found that in large contract-farming schemes involving many thousands of farmers in China, contracts were exclusively with men. Also, Porter and Philips-Horward (1997) report that in sugar contract schemes in South Africa, the majority of contractors are men.

Our data on the bean export sector in Senegal are in line with these findings. We find that only one out of the 59 contracted bean farmers is a woman. Also our interviews with the exporting French bean companies confirm that they are strongly biased towards men in selecting contracted suppliers.

The reasons mentioned for this exclusion of women contractors relate to their limited access to productive resources. Women in developing countries are generally disadvantaged in their access to productive resources such as land, capital and credit, and in access to information and technology (Temu, 2005). The preference of food companies to contract with men is driven by companies' need to secure access to land and labour for a guaranteed supply of primary produce (Dolan, 2001). Women are excluded because they lack statutory rights over land and because they have less authority over family labour compared with their husbands and male siblings. In the case of vegetable supply chains in Senegal, women also lack claims to irrigation water and infrastructure – crucial inputs for bean production in the *Niayes* region – which further disadvantages them in contracting with the export industry.

3.1.2. Agro-industrial employment

Agro-industrial estates and agro-processing companies often employ a large number of workers. This is documented for the case of horticulture exports in SSA (see Table III-4). The figures show that in many poor SSA countries, thousands of people are employed in the horticulture agro-industry. Part of this employment might concern urban jobs in processing units and pack houses, but the lion's share is rural employment.

In sharp contrast to high-value contract-farming, there is no bias in favour of men in the labour market effects of modern supply chains. In fact, the data in Table III-4 show that a large share of the thousands of employees in the SSA horticulture agro-industry is female. From our own studies in Senegal, we find that 90 percent of the agro-industrial employees in the bean sector and 60 percent in the tomato sector are female. Also, in other countries, the share of female labourers in the FFV agro-industry is particularly high; for example, in the flower industry in Kenya and Uganda (75 percent) and the fresh vegetable sector in Zambia (65 percent).

⁵¹ This mostly concerns examples from small individual contract-farming schemes. For example, Plantconsult (2003) reports a successful contract-farming scheme in the export vegetable sector in Kenya where the majority of the 160 smallholder farmers involved in the scheme are women.

TABLE III-4

Employment in the horticulture export agro-industry in selected Sub-Saharan African countries

Country	Commodity	Year of survey	Number of employees in the FFV agro-industry	Share of female employees
Cameroon	Banana	2003	10.000	
Cote d'Ivoire	Banana & pineapple	2002	35.000	
Kenya	Flowers	2002	40,000 - 70,000	75%
	Fruits & vegetables		2.000.000	
Senegal	French beans	2005	12.000	90%
	Cherry tomatoes	2006	3.000	60%
Uganda	Flowers	1998	3.300	75%
Zambia	Vegetables	2002/03	7.500	65%
	Flowers	2002/03	2.500	35%
South Africa	Decicuous fruit	1994	283.000	53%

Source: Arias (2003) for Cameroon; Minot and Ngigi (2004) for Cote d'Ivoire; own calculations from case studies for Senegal; Smith et al. (2004) and Barrientos et al. (2001) for Zambia and flowers in Kenya; Jaffee (2003) and Lambert (2002) for fruits and vegetables in Kenya; Danson et al. (2004) and Barrientos et al. (2000) for South Africa.

The preference of agro-industrial firms to hire women has to do with the delicate work in harvesting and handling fresh produce for which women are more adept. For example, in the bean sector in Kenya, female farmers were found to do a much better job in harvesting, leading to substantially higher profits (Kimenye, 2005).

3.2. Intra-household allocation of resources

Rural households participating in modern supply chains through product market channels allocate (part of) their land, labour and capital resources to the production of the high-value commodity under contract with the agro-industry. Hence, high-value contract-farming has direct implications for the allocation of productive resources within the household. It has been argued that contract farming, and the exclusion of women from contracts, could give rise to intra-household conflicts over the allocation of land and labour resources between contract requirements and women's priorities with regard to food production (Sing, 2002). The reallocation of land and labour resources to high-value commercial production might result in decreased access to resources for women farmers engaged in subsistence food production, and ultimately lead to the deterioration of the food security situation of rural women and children (Baumann, 2000).

Convincing and quantitative evidence on this issue is lacking. What is available from descriptive studies is mixed and yields no consensus. Several authors point to the fact that, while men control the contracts as contracting party, the majority of the farm work done on contracted plots is performed by women as family labourers, thereby replacing labour from food production. For example, Porter and Philips-Horward (1997) observe that in 70 percent of the cases of sugar contract-farming in South Africa, the principal farmer working year-round on the sugar cane plots is a woman. Sing (2002) reports that women end up working longer hours than men in

vegetable contract-farming schemes controlled by male farmers in the Indian Punjab. Eaton and Sheperd (2001) observe that in a large contract-farming scheme involving thousands of farmers in China, women perform the bulk of the work, although they are completely excluded from signing contracts themselves. They also report cases where contracted tobacco production in East Africa conflicts with the cultivation of basic food crops by women farmers. Dolan (2001) argues that specifically the growth of high-value horticulture supply chains has been detrimental for rural women in Kenya because land and labour resources that were traditionally used by women to cultivate vegetables for home consumption and sale in local markets have been appropriated by men for export vegetable production under contract.

Other studies do not find evidence that a reallocation of productive resources to high-value contract-farming leads to intra-household conflicts and adverse food security effects. Minten, Randrianarison and Swinnen (2009), although not explicitly addressing gender issues, find that high-value vegetable contract-farming in Madagascar leads to improved productivity in food (rice) production through technology spillovers, thereby improving the availability of food in the household and shortening the lean period or 'hunger season'.

Our analysis from the bean export sector in Senegal also suggests that gender conflict over land and labour resources is quite limited. Beans are exported from Senegal to the EU only during the off-season (November-April) and households only allocate part of their land and labour resources to contracted bean production and only during a confined period, which does not coincide with the main agricultural season when staple food crops and other subsistence crops are cultivated.

3.3. Intra-household control over income

The general pattern in modern supply chains is that women perform a large share of the work, either as family labourers on contracted plots controlled by men or as hired workers in the agro-industry. Yet women's control over income resources in the household is strongly correlated with women's access to labour markets and paid employment (Quisumbing, and Mc Clafferty, 2006). Therefore, the way households benefit from modern supply chains, through product-market channels or labour-market channels, and the way women are employed, as family farm workers or as hired agro-industrial employees, has major implications for the intra-household control over the income derived from these activities.

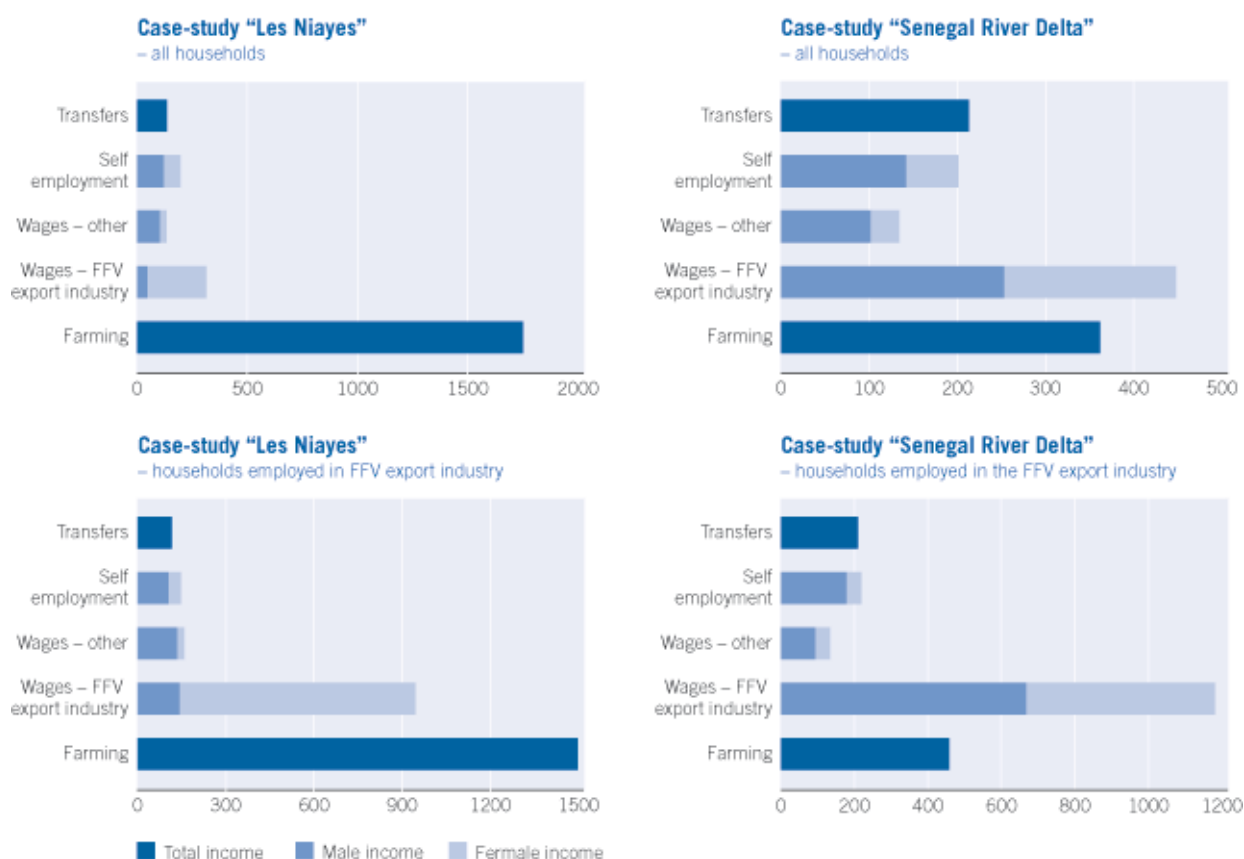
As men are mostly the contractors who deal with the contracting firm, they also receive and therefore directly control the income derived from high-value contract-farming. Women performing the bulk of the work on contracted plots often do not reap the full benefits of their labour, as family work is often unpaid or inadequately remunerated. The share of the income derived from contract farming that is controlled by women depends on women's bargaining power in the household. So, while contract farming in general may be beneficial for producers, the benefits are largely controlled by men and are not directly awarded to women family farm workers. This has been empirically observed in several cases: for example in vegetable contract-farming in India (Sing, 2003) and China (Eaton and Sheperd, 2001). In her case study on Kenyan horticultural exports, Dolan (2001) reports that the intra-household resource conflict arising because of vegetable contract-farming mainly comes down to a conflict over the use of the increased income generated.

Contrarily, women employed in agro-industrial companies benefit more directly. In this case, women are themselves the ‘contracted party’ in the labour agreement with the companies and directly receive the cash wages. These wages earned outside the family farm are not only received directly by the women workers themselves but are also more directly attributable to their labour, which increases their bargaining power over that income (Zhang *et al.*, 2004). Moreover, women’s wage income can add importantly to total household income, which might further improve the decision-making position of women in the household, benefit their economic independence and enhance their empowerment.

Graph III-4 presents total household income from different sources and documents the importance of female-generated and -controlled wage income from modern supply chains in Senegal. Where possible, we distinguish between male- and female- generated income.⁵² An important share of the income derived from wages earned in the horticulture agro-industry pertains to women, and these wages contribute importantly to total

GRAPH III-4

Sources of household income in two case-study regions in Senegal



Source: Own calculations from survey data.

52 The data do not allow distinguishing between male and female income for income derived from the own farm and for transfers. In addition, farm input data are not detailed enough to distinguish income from contract-farming from other farm income.

household income. In the *Niayes* area, wages earned in the bean export industry make up one-third of household income for those households involved in agro-industrial employment, and 85 percent of these wages pertain to women. In the *Senegal River Delta* area, 45 percent of the income derived from employment in the tomato export industry pertains to women, and this agro-industrial employment has become the major source of income in the region. These figures indicate that the growth in modern supply chains in these regions has contributed importantly to increasing female-generated cash income.

Household income is calculated as yearly income for the 12-month period prior to the survey. “Farming” includes income from cropping and livestock rearing and is calculated taking into account total production, the cost of variable inputs including hired labour, and the depreciation of machinery and equipment. “Wages-FFV export industry” includes income from wages earned in the French bean/tomato export agro-industry. “Wages-other” includes income from all other wage employment. “Self-employment” includes income from non-farm family businesses and is calculated taking into account revenue, costs of variable inputs and depreciation of machinery and equipment. “Transfers” includes public and private transfers such as subsidies and remittances.

4. The effect of modern supply chains on rural labour markets

4.1. Feminization of the rural labour force

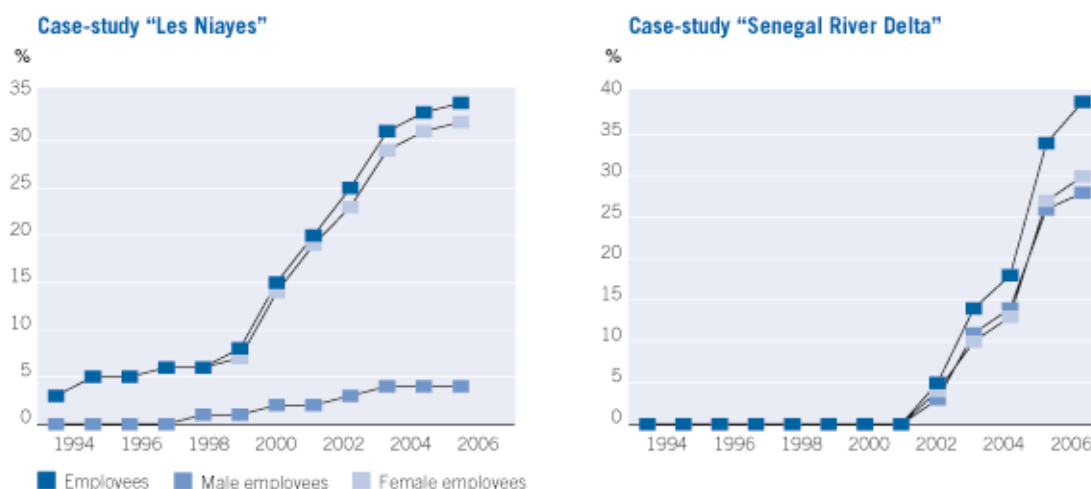
The discussion above reveals that the growth in modern supply chains in developing countries has been associated with growing female employment in the emerging rural agro-industries and important contributions of female wages to household income. These labour market effects are specifically important because off-farm employment opportunities for rural women in developing countries are often lacking, while female wage employment is positively associated with women’s well-being and broader development goals. The extent to which modern supply chains contribute to the feminization of the rural labour force and raising women’s off-farm employment opportunities is therefore an important concern.

Based on survey data for Senegal, we can measure the importance of the observed gender and labour market effects. First, we find that in both study regions, almost one-third of rural households have women who are currently employed in the horticulture agro-industry (Graph III-5). In the *Niayes* area, female employment in the bean export industry increased from less than 10 percent of local households in 1999 to more than 30 percent of households in 2005. Similarly, in the *Senegal River Delta* area, the share of households having women employed in the tomato export industry increased sharply after 2001 (when tomato export activities in this region started) and reached about 30 percent in 2006. In this case, male employment is almost as high as female employment, while in the *Niayes* region male employment in the horticulture agro-industry represents less than 5 percent of households.

Second, apart from the emerging modern agro-industry, off-farm employment opportunities for women are found to be very limited. More than 90 percent of women employed in bean-exporting companies indicate that before they started this employment they had never worked outside the home and household farm. Similarly, in the *Senegal River Delta* area, only 11 percent of households have women household members working

GRAPH III-5

Household participation in female and male employment in the horticulture agro-industry in two case-study regions in Senegal



Source: Own calculation from survey data.

as off-farm wage labourers outside the tomato export industry (compared with 22 percent for male household members). This is also reflected in the income figures presented in Graph III-4. In both research regions, the wages earned in the agro-industry are much more important than any other type of income from off-farm and non-farm activities, and this is especially so for women's income.

4.2. Gender discrimination and ethical standards in rural labour markets

4.2.1. Gender discrimination

Despite the fact that wages earned by women might contribute significantly to household income, increase their economic independence and foster further development goals, critics of the feminization of labour markets argue that labour markets themselves are bearers of – and even reinforce – gender inequality (Casale, 2004; Barrientos *et al.*, 2003). Gender discrimination in labour markets most importantly comes from wage differences between male and female workers but also from differences in job security, working conditions, etc. Some studies find evidence of lower wage rates for women compared with men in rural off-farm jobs in developing countries (Canagarajah *et al.*, 2001; Lanjouw and Feder, 2001).

Previous studies on high-value horticulture production indicate that these supply chains contribute to gender inequality because of discriminatory practices in the labour market (Barrientos, McCleneghan and Orton, 2000; Barrientos and Kritzing, 2004). Based on interviews with agro-industrial workers in horticulture supply chains in Kenya, South Africa and Zambia, Barrientos, Dolan and Tallontire (2001, 2003) claim that: women receive lower wages than men; that women have temporary, seasonal and casual jobs while men hold the fewer permanent jobs; women are more often unemployed during the winter months than men; and women's employment is characterized by longer hours, no social protection, job insecurity, informal relations and poor working conditions.

They conclude that in the African horticulture agro-industry, firms shift the risk of production onto women workers through adjustment of employment levels and driving down employment costs of flexible, informal and low-paid female labour.

Based on our survey of hundreds of workers in the bean and the tomato agro-industry, we come to different conclusions. Table III-5 summarizes some characteristics of the working conditions for male and female workers in both supply chains, including their average daily wages. First, in the tomato export industry in the *Senegal River Delta* there appears to be some gender bias in the allocation of permanent positions in favour of males: 28 percent have permanent positions, while women have only 2 percent. However, in all other aspects we do not find female discrimination. There are very few male employees in the bean agro-industry in the *Niayes* region and these male employees are – just as the female employees – all casual or temporary workers.⁵³

Second, we find no significant differences in the daily wages of female and male temporary employees in either of the case studies. We even find that female wages are somewhat higher than male wages in the *Niayes* case study – on average 1 365 FCFA per day versus 1 197 FCFA per day – but the difference is not significant. However, permanent employees have wages that are 70 percent higher than those for temporary and casual labourers. This indicates that differentials in wages relate to differences in the type of employment and associated differences in responsibilities within the job rather than to gender discrimination.

Third, we find that among temporary employees, women are working on average around five and one-half months per year in the horticulture agro-industry, while for men this is slightly higher (about seven months). These observed differences are less pronounced than previous observations in the literature and are not necessarily related to the use of female casual labour for low-cost flexible labour adjustment by agro-industrial firms. An alternative explanation is that women themselves choose to allocate their labour to off-farm employment more flexibly, in order to accommodate their household chores. In both Senegal case studies, we observe that several women of the same household⁵⁴ often take turns working in the agro-industry and staying at home for housekeeping and child care.

In summary, our data show that while, in one case, there is some gender bias in the allocation of permanent positions versus casual jobs, there is no other evidence of wage differentials between male and female agro-industrial employees in high-value supply chains. This is an important finding as the available empirical evidence indicates that, in general, rural labour markets do entail gender discrimination in wages.

4.3. Ethical standards

A possible explanation for labour markets in modern supply chains being more gender-neutral than rural labour markets in general relates to the use of high standards in these supply chains. Many export chains are subject to strict ethical standards and codes of conduct that are meant to improve poor working conditions and abolish gender discrimination. There is a difference in the degree to which private certification schemes

53 The lack of permanent employees in our sample is due to the fact that all of the exporting companies are relatively small family-run companies in which the permanent positions are filled by family members who are not included in our sample of rural farm-households.

54 We need to note that our Senegal household samples concern extended households with on average 16 members. Also, almost half of the household heads in the samples (48 percent) have two or more wives.

TABLE III-5

Employment conditions for female and male labourers in the horticulture agro-industry in two case-study regions

	Case-studies				
	Les Niayes		Senegal River Delta		
	Female workers	Male workers	Female workers	Male workers	
Number of workers in the sample	221	14	305	196	
Share of workers					
casual/temporary workers	100%	100%	98%	72%	
permanent workers	0%	0%	2%	28%	
Daily wages (FCFA)					
temporary workers	(mean)	1 365	1 197	1 648	1 686
	(median)	1 225	1 050	1 700	1 700
permanent workers	(mean)			2 400	2 566
	(median)			2 400	2 400
# of months (temporary workers)	(mean)	5.32	7.64	5.59	6.51
	(median)	5	6.5	4	5.5

Source: Own calculations from household survey data

incorporate such ethical standards. For example the Ethical Trade Initiative includes provisions on ethical codes of conduct – including provisions on forced labour, child labour, gender and racial discrimination, freedom of association, working hours, labour contracts, living wages – while EurepGAP certification concentrates on food quality and safety standards, and does not explicitly stipulate codes of conduct and refers to national legislation for certain ethical issues such as working hours and minimum wages. Although it has been argued that the effectiveness of codes of conduct in improving (female) workers' conditions is limited⁵⁵ (Barrientos *et al.*, 2003), compliance with stringent ethical standards and certification schemes such as the Ethical Trade Initiative might reduce gender discrimination in high-standards supply chains and improve working conditions and wages. Compliance with stringent ethical standards might contribute to explaining the observation that in our Senegal studies, daily wage rates in the tomato agro-industry – controlled by one multinational company that is certified by the Ethical Trade Initiative – are 20 to 40 percent higher as compared with the bean export industry, where no explicit ethical standard is used (Table III-5).

55 The main arguments are that ethical standards fail to address the complex needs of informal workers, for whom the conditions of employment are often worse, and that the environment in which supply-chain governance – including standards – is shaped is not gender-neutral and fails to address women's reproductive work (Barrientos *et al.*, 2003).

Conclusion

A key result from this study is that the growth in high-value agricultural production and the spread of modern supply chains across developing countries can be associated with direct beneficial effects for rural women and reduced gender inequalities in rural areas. The arguments and evidence reviewed in this paper suggest that gender effects of the growth in modern supply chains differ strongly depending on whether rural households participate through product markets or through labour markets. Women benefit more and more directly from agro-industrial production and the creation of employment in these agro-industries than from smallholder contract farming. This calls for a shift in policy thinking from the mere promotion of smallholder contract farming (to assure an equitable distribution of the gains from high-value agricultural trade) towards integrating insights on labour market effects and employment policies, including the use of labour standards and the fight against gender discrimination.

However, important questions and unresolved issues remain. There is, for example, no conclusive evidence on the link between high-value contract farming and food security at the household level. In addition, the indirect effects of increased female employment outside the household and the family farm are poorly understood – for example, the effects on intra-household decision-making power and child education. There is also a need for more empirical evidence on issues of gender discrimination in rural labour markets and modern supply chains.

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Gender dimensions of rural employment in agriculture and public works programmes

Experiences from South Africa: Differentiated pathways out of poverty

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1. Introduction

1.1. Background

Persistent poverty, unemployment and underemployment remain major challenges facing developing countries (World Bank, 2002; Mashiri *et al.*, 2008). In remote rural areas, where low levels of access to higher-order rural service centres further inhibit formal and informal employment opportunities, finding ways in which to address poverty and unemployment is all the more challenging (ILO, 1999; IFAD, 2001; Liversage & Carpano, 2002). At the same time, development projects that seek to enhance the provision of basic services are being implemented in many rural communities under conditions of limited financial resources, especially in areas where low population densities render investing in basic infrastructure costly.

Generating and extending beneficial and non-exploitative opportunities for employment is an enduring way to tackle poverty (FAO, 2004). Strategies that have been employed to reduce poverty and improve livelihoods for developing communities include:

- economic growth with expected trickle-down in the long term;
- social safety net programmes that offer short-term relief but have only a limited impact in alleviating poverty in the long term; and
- linking employment programmes explicitly to economic growth, for example by introducing employment concerns into mainstream investment policy.

The emphasis has been on the first two approaches. However, the latter approach can, if implemented effectively, address both the short-term income-generation needs of poor communities and economic growth in the long term. A typical example of this strategy is the adoption of community-based labour-intensive methods in basic infrastructure provision, such as investment in access roads, irrigation works, community markets, low-income housing and schools (Riverson *et al.*, 1991; ILO, 1999; World Bank, 2002, 2003; FAO, 2004). For most rural areas, infrastructure development tends to be the fulcrum that anchors sustainable development endeavours. The choice of the infrastructure sector as a catalyser for pro-poor growth is grounded on several factors. Infrastructure is crucial for investment and economic growth in other sectors, and the relative weight of this sector

in the overall economy is relatively high, especially in developing countries (Tajgman & Jan de Veen, 1998). Often, upwards of 70 percent of public investment is channelled into this sector (World Bank, 2002). In this context, local and international experience has lauded the potential of community-based public works programmes to simultaneously provide jobs, alleviate poverty, build local capacity, create community assets, reduce the cost of construction and maintenance and improve infrastructure (Department of Public Works, 1997; Mashiri *et al.*, 2005).

A broad review of rural women's location within local and global norms and patterns of poverty highlights the need to ensure that the employment benefits that can accrue from infrastructure investments do not perpetuate gender inequality and gendered patterns of poverty through the exclusion or exploitation of women (ILO, 1992, March *et al.*, 1999; Kehler, 2001, World Bank, 2002, Shackleton & Mander, 2005, May, 2006, Venter & Mashiri, 2007, Buiten, 2007). Traditional perceptions that women are not 'appropriate' employees within labour-intensive and technical sectors also need to be proactively challenged. It is intriguing to observe that poor rural women in developing countries are almost always tasked with many labour-intensive forms of work on a daily basis, such as the collection and transport of heavy loads of water and wood, as well as agricultural work. The term 'employment-intensive' is used by the ILO to describe a competitive technology where optimal use is made of labour as the predominant resource in infrastructure projects, while ensuring cost-effectiveness and safeguarding quality (ILO, 1999). Given that a key resource among the poor is their own labour, employment-intensive initiatives offer a sure way in which government can directly contribute to addressing poverty.

This paper not only explores both the direct and indirect benefits, but it also investigates the extent to which community-based rural road maintenance and agriculture development projects can be used as tools to empower women, the elderly, children, youth and the unemployed to work towards attaining sustainable rural livelihoods (Department of Public Works, 1997). It also addresses gender dimensions of the projects.

1.2. Methodology

A mixed-method approach was employed to assess the experiences and impacts of the *Siyatentela*⁵⁶ (Mpumalanga Province), *Gundo Lashu*⁵⁷ (Limpopo Province), *Zibambele*⁵⁸ (KwaZulu-Natal Province) and *Sakha Isizwe*⁵⁹ (Province of the Eastern Cape) labour-based routine road maintenance programmes, and the *Siyazondla*⁶⁰ (Province of the Eastern Cape) rural household agriculture programme in the context of a sustainable rural livelihoods approach. While the *Siyatentela* programme is dealt with extensively, a rapid appraisal of similar programmes in KwaZulu-Natal, Limpopo and Eastern Cape provinces was conducted to improve the depth and representativeness of study findings and recommendations.

In terms of the main case study, *Siyatentela*, both qualitative and quantitative methods were employed. The approach was centred on a 'before and after' cross-sectional survey of more

56 A Swati word meaning "doing it for ourselves"

57 A TshiVenda word meaning "victory is ours"

58 A Zulu word meaning "doing it for ourselves"

59 A Xhosa word meaning "we are building a nation"

60 A Xhosa word meaning "we are taking care of ourselves"

than 80 percent of *Siyatentela* participants to independently evaluate programme impacts. Key informant interviews (with regional managers, road superintendents/supervisors and ward councillors), focus group discussions, physical observations, assessment of project records, participatory road surveys with *Siyatentela* road maintenance gangs and household interviews with beneficiaries were employed to solicit information.

2. Labour-based routine rural road maintenance and household agriculture development

2.1. Overview

In order to break poverty cycles in the medium to long term, various provincial departments of roads and transport in South Africa have employed a mixed-contract approach (individual, household, contractor) with the common aim of increasing beneficiary numbers in efforts to push back the frontiers of poverty. The poorest of the poor, especially women-headed households, are identified and selected by communities to participate in the programmes.

2.2. Transport infrastructure construction and maintenance: Case study profiles

Generally, community members from all programmes (depicted in Table III-6) believe that the projects have opened up their areas⁶¹ for development and expanded the community horizons with regard not only to understanding developmental issues pertaining to their areas, but also with respect to perceiving and acting on economic opportunities. While, on average, all projects share the strength of creating alternative pathways out of poverty, they also share a weakness in that these alternative pathways are not couched within the ambit of an overarching strategic framework. In addition, because these pathways are externally prompted, they often have limited shelf life without continuous support from government or donor agencies. Table III-6 provides a summary of the common and divergent project issues that relate to the major rural labour-based project experiences in South Africa.

2.3. Siyazondla agriculture and food production: Case study profile

The Eastern Cape Department of Agriculture, in collaboration with the Accelerated and Shared Growth Initiative of South Africa: Eastern Cape and Eastern Cape Socio-Economic Consultative Council, have been engaged in a process of seeking to transform agriculture production systems, livelihood patterns and human development. The process, supported by donor organizations, is part of a broader effort to tackle poverty, create employment and build the capacity of local communities.

The approaches are broadly referred to as Agrarian Transformation and Food Security pillars of the Provincial Growth and Development Plan (PGDP), which has created programmes such as Massive Food Production, *Siyazondla* Homestead Food Production, Comprehensive Nutrition Programme and Integrated Agricultural Infrastructure Programme. However,

61 Limpopo Province (e.g. Giyani, Njelele, Musina & Mutale), Province of the Eastern Cape (e.g. Port St. Johns, Qaukeni, King Sabata Dalindyebo, Ntabankulu & Nyandeni), KwaZulu-Natal Province (e.g. Ugu, Nkonkobe & Sisonke)

in the context of this paper, the focus is on *Siyazondla* homestead food production. One woman participant from the Eastern Cape provided the following testimony:

“...Some of the women in my community including myself have started a vegetable farm with the help from the Siyazondla Homestead Food Production programme. Now we grow our own food and sell vegetables too. We use the money we get from selling vegetables to pay schools fees for our children and buy their school uniforms. I do not

TABLE III-6
Experience of labour-based routine road maintenance in South Africa

Parameter	Zimbabwe	Gundolashu	Sakha Isiziwe
Programme champions	KwaZulu-Natal Provincial Department of Transport	Limpopo Provincial Government Roads Agency Limpopo (RAL) International Labour Organization (ILO) Department for International Development (DFID) Department of Labour	Eastern Cape Department of Roads & Transport
Programme thrust	Labour-intensive rural road maintenance to improve access roads, create local jobs and alleviate poverty	Address backlogs in rural road infrastructure and create jobs in order to improve rural livelihoods	Community-based transportation programme Create new work and business opportunities for disadvantaged communities
Programme targeted beneficiaries	Unemployed youths, adults, women, persons with disabilities, and the elderly in rural areas	Workers from communities located within 4 km of respective road corridors	Targets poorest of the poor (mainly women-headed households)
Contract description	Household-based rather than individual focused	Traditional client-contractor-consultant relationship	Household-based rather than individual-focused
Working conditions	Flexible 60 hours of work per month	Normal industrial working conditions i.e. 8 am – 5 pm	Normal industrial working conditions i.e. 8 am – 5 pm
Equipment and materials	Wheelbarrows, picks, shovels, machetes, slashers, gloves, traffic cones, safety boots, vest reflectors	Appropriate mix of labour-based and high-technology methods and equipment use	Appropriate mix of labour-based and high-technology methods and equipment use
Stipend/wages	R450 – R1 200	Market wages and reward compensation for employees	Market wages and reward compensation for employees
Type and scope of work	<400 vehicles per day (road surface cleaning and verge maintenance covering areas between 500m – 800m road sections i.e. approximately 7 000m ²) <400 with more than 15% heavy vehicles (verge maintenance – grass cutting, weeding, drain cleaning & litter removal covering areas between 500m each side of the road i.e. approximately 7 000m ²) >1 000 vehicles per day (no Zimbabwe contractors used)	Rehabilitation and maintenance of roads in all levels of classification	Use the Kenyan Lengthman model to allocate and measure labour inputs/outputs ratios
Training and skills transfer	Technical and maintenance skills Social skills	Life and basic entrepreneurial skills Landscaping/kerb laying Scaffolding Supervisory skills Farm business management Computer skills	Skills acquisition through empowerment of communities Road construction and maintenance skills and theory and experience

want to think how difficult our lives could be without such programmes. It means families would have to traditionally depend on absentee husbands who have migrated elsewhere to look for employment. In fact, we are learning a lot from the programme and from each other, since some of us have only been subsistence farmers all our lives...” (extract of an interview with a woman-headed household, 22 September 2008 in Tsolo, Eastern Cape).

Parameter	Zibambele	Gundolashu	Sakha Isiziwe
Support services	Acquisition of identity documents, opening bank accounts, organizing them into credit unions and savings clubs and investing savings into other productive activities	Construction Industry Development Board (CIDB) contractor profiling, registration and development	Programme linked to the contractor grading system of the construction industry development board (CIDB) Support SMMEs Sakha Isiziwe Learnership Programme
Programme outcomes	95% of contracts awarded to women-headed households	Each trained contractor has an average annual turnover of R5 million 267 km of roads rehabilitated and 142 km gravelled 24 km sealed at a cost of R70.7 million 24 contractors trained. 13 contractors (54%) are female, 70% of all trainees are youth 8 engineering consultants trained 10 RAL staff trained in LBM management More than 59 272 training days provided so far 895 627 worker days created in the employment of 3 139 workers as follows: 1 697 workers (54.1%) female, 1 326 workers (42.2%) youth, 18 (1%) disabled	1 995 households contracted (2006/07) Used in urban renewal (Motherwell & Ngangelizwe) Integrated Sustainable Rural Development (Umzimkhulu) Learnership programme has recruited 100% historically disadvantaged individuals, 100% youth and more than 60% female learner contractors. 220 temporary jobs have been created within this programme This programme has created access to finance, thus facilitating development of financial track-records for the learners through ABSA (a commercial bank)
Strengths	Skills transfer and training model Community employment and local economic development Integrated rural development approach Flexible working conditions and use of project equipment Targeting the indigent especially women-headed households	Comprehensive governance institutional strengthening model Small and medium enterprise contractor development programme Employ local communities within a 4 km road corridor radius	Capacity building and development Learner skills development Local transportation system improvement
Weaknesses	Top-down initiative Lack of a clear model for transfer and sustainability beyond government funding Lack of a clear strategy on exit options for pursuing alternative pathways out of poverty	Excludes members from beyond 4 km road corridor radius Government-driven (top down) Lack of a clear strategy on exit options for pursuing alternative pathways out of poverty	Government-driven (top down) Lack of a clear strategy on exit options for pursuing alternative pathways out of poverty

TABLE III-7
Summary of Siyazondla project impact in the Eastern Cape Province

District	Projects (number)				No. of households	Budget R	% spent
	Clinic Garden	Home Garden	School Garden	Community Garden			
Alfred Nzo	22	570	38	10	727	2.0 million	55
Chris Hani	11	500	15	7	830	3.0 million	35
O. R. Tambo	8	741	11	10	3 460	4.0 million	61
Ukahlamba	1	757	3	2	764	2 million	88
Total	86	6 323	130	43	10 266	11 million	57

Source: Cabinet Lekgotla, 2007

Table III-7 suggests that a substantial number of rural dwellers are being offered and are enjoying alternative pathways to addressing poverty owing partly to programmes such as *Siyazondla*.

Although no full-scale impact assessment of the programme has been conducted, the preliminary assessment indicates positive benefits. These include:

- assistance with the establishment of gardens (at clinics, homes, schools and in communities);
- provision of seed capital and starter packs for agriculture production such as farming implements (e.g. wheelbarrows, forks, spades, rakes, watering cans) and production inputs (e.g. seeds and seedlings, fertilizer, insecticides);
- provision of infrastructure (e.g. irrigation pipes, garden fencing, harvesting equipment);
- linkage to marketing, skills and knowledge transfer systems and a land-care programme (beneficiary communities have successfully organized themselves into collective buying and marketing structures, which could be the cornerstone for agrarian transformation);
- provision of opportunities for growth (e.g. the programme provides exit and migration pathways to graduate from subsistence to small-scale commercial farming through the *Siyakhula* food production component).

Overall, the *Siyazondla* programme is currently the highest contributor to local sources of income (DoA, Province of the Eastern Cape, 2008). However, some commentators have labelled the massive food programme a 'failure'. This is premised on the weak rural agro-logistics infrastructure support system, a lingering perception that beneficiaries appear to continue to associate development with receiving handouts from government, late 'no till' planting season because of challenges of mobilizing inputs such as seed, fertilizer and equipment, the dysfunctional land care programme as evidenced by the continued visible soil erosion, and poor access and information support systems. What is clear from these contestations is that sustainable agricultural transformation is a process and not an event. The programme is thus being continuously improved.

3. Siyatentela rural road maintenance programme

3.1. Siyatentela case study overview

The Mpumalanga Department of Roads and Transport (MDORT) implemented the *Siyatentela* employment-intensive routine rural road maintenance project with the purpose of not only cutting the cost of road maintenance and improving road conditions, but also as part of a much broader initiative to take advantage of the government's extended public works programme (Mashiri *et al.*, 2008). The *Siyatentela* programme, which was modelled on the relatively well-known *Zibambebe* programme in KwaZulu-Natal, targets women in indigent households, especially women-headed households. These women are identified through a consultative and rigorous screening and verification process involving many stakeholders, including local political and traditional leadership, to ensure that the households most in need are included.

The programme commenced very modestly in the 2005/06 financial year in Ehlanzeni District Municipality in the Mpumalanga Province, with a budget of R300 000 and employing ten women. It has since expanded to all of the three districts that constitute the province, with a budget of R1.5 million towards the end of the 2005/06 financial year and employing 55 women. *Siyatentela* now employs 544 women maintaining 272 km of rural roads in Ehlanzeni, Gert Sibande and Nkangala districts. Largely because of its apparent success, the provincial government has sought to scale up the programme to serve more poor households and, at the same time, service more community assets in the form of rural roads. In 2008, plans and projects to increase the programme budget to R10 million per year were at an advanced stage. However, in order to upgrade this programme from R1.5 million to R10 million, there was a compelling need for MDORT to undertake an independent impact assessment of the programme. The outcome of the study has provided MDORT with adequate empirical evidence to arrive at an informed decision to scale up the programme.

3.2. Siyatentela case study findings

3.2.1. Siyatentela contracts and employment frameworks

Siyatentela awards renewable 12-month contracts. Although an individual signs the contract, in order to break the cycle of poverty in indigent households, *Siyatentela* 'employs' the household rather than an individual, thus ensuring continuity should anything befall the original woman employed. Depending on skill and experience, participants earn weekly stipends of between R600 and R1 500. *Siyatentela* contracts women to maintain the drainage system and road signs, ensure good roadside visibility, maintain the road surface, and clear the road of litter and noxious weeds. While on paper each woman employed is allocated half a kilometre, the actual length depends on the nature of the terrain; the more difficult the terrain, the shorter the length of road. Overall, the employed women work in groups of ten to maintain a 5 km stretch of road close to their homes. Participants work two days per week with a maximum of 64 hours per month. *Siyatentela* encourages flexible working hours, thus allowing participants ample time to deploy their labour elsewhere.

"...Since the women work only two days a week, we have been encouraging them to start small gardens at home. Some of them are now doing brisk business selling vegetables to other programme beneficiaries and to the community at large..." (Project supervisor – February 2008).

3.2.2. Training, knowledge and skills transfer

Participants were technically trained on road maintenance and life skills over the duration of their contract.

"...Before the project, we did not know anything about drainage. Now we know what it means to have a good drainage system as well as how to maintain such drains. We are now in a position to undertake similar work when new opportunities arise, using skills we have acquired through Siyatentela. In addition to basic road maintenance training, we have also received additional training in life skills, gardening, how to run and manage small enterprises such as a poultry or piggery project and HIV/AIDS awareness. This kind of training has made us better people than what we were before we joined the programme..." (Project participant – February 2008).

Siyatentela also helps women to open bank accounts, establish savings clubs and invest some of their savings in other productive activities. Participants indicated that training improved their skills and capacity to confidently work on the project. They now employ maintenance skills learned in the project in their homes and community.

3.2.3. Livelihoods and income use: Entrenching the rural private sector

The communities in which the *Siyatentela* programme is operating are largely dependent on subsistence agriculture based on small pieces of land or home gardens growing mostly maize and horticultural crops. A small number of households rely on both formal and informal employment and mixed, largely subsistence farming.

About 80 percent had a total monthly income of between R601 and R1 500. However, while 20 percent of households interviewed depend solely on income from the *Siyatentela* project, all salary incomes reported by respondent households derive from the project largely because these are the most indigent households. Indeed, interviews from all project sites indicated programme beneficiaries were grateful and appreciative of this intervention.

"...This project has really helped us a lot and now we can earn our own money for use in the home. We certainly hope and would like the project to continue strongly into the future, bringing more women like me into its fold..." (extract from testimony of one of the women involved in the Siyatentela programme – February 2008).

3.2.4. Wage use by households participating in Siyatentela

Upwards of 80 percent of the money earned from the project is used for food, clothing, school fees, agricultural inputs, medical fees and household assets. In this way, income earned on *Siyatentela* benefits the whole household.

"...When women get their wages, they buy food and other needs for the family while men would most probably use the money to drink beer and play lotto..." (key informant interviewee – Siyatentela foreman – February 2008).

Just over 50 percent of the respondents also reported that they use the money for burial society contributions, a significant cost burden within many households and part of fostering a sense of dignity for households and communities, especially given the HIV/AIDS pandemic that has not exhibited any signs of relenting.

Income earned flows into different geographic economies, which, to some extent, has an impact on local economic stimulation. A total of 12 percent reported that their entire income is used only within the local community, and the majority use their wages in both the local community and in other rural service centres and towns.

Upwards of 60 percent of respondents use their wages to procure goods and services locally and in the nearest rural service centre, as aptly described in a focus group discussion:

“...We are making wise use of the wages we earn on the project. We have assisted each other in acquiring basic household goods that we did not possess before being employed on the project, including refrigerators, television sets, radios, electric stoves and other items of value. We have also used our wages to construct and improve our assets such as houses. This has certainly brought a sense of pride and achievement to our families and the community at large. These achievements are unlikely ever to have happened without the project...” (Focus group testimony, February 2008).

Since participants often open bank accounts into which the government pays their wages, some of the women contractors spent their wages in distant rural service centres and towns with banking facilities. This represented some leakage of funds that could have been employed to stimulate small business in programme areas. A partial remedy could involve enabling the women to access their wages in their local areas, which could confine their purchases to essentials that can be acquired locally.

3.2.5. Social capital

Project participants felt that the deliberate affirmation and involvement of women through the *Siyatentela* programme is a positive development given that women often single-handedly fend for their families with meagre resources (Mashiri *et al.*, 2008). In addition, access to income and the formation of voluntary associations such as savings clubs has broadened participants' social networks. This is succinctly illustrated by one participant's testimonial:

“...I used to live in a makeshift plastic shack. My family and I were used to going for days without a decent meal. We were surviving on our neighbours' generosity. I had never had a brand new pair of shoes in my life, nor travelled beyond the village, let alone visiting a big city like Nelspruit. I had never had a bank account in my life. Thanks to Siyatentela, I now have a proper roof over my head, a bank account, go to town at least once every month, have all these many people and friends I can talk to...” (extract of an interview with a project participant – February, 2008).

The setting up of investment clubs to facilitate the pooling of resources for procuring a variety of household assets is indeed a prime example of community development in practice. Furthermore, these social capital gains contribute in some part to addressing strategic gender needs (e.g. transforming existing subordinate relationships between men and women such as power and control, legal rights, equal wages and gender division of labour), thereby challenging existing social formations that shape gender inequality (March *et al.*, 1999).

3.2.6. Impacts of improved road maintenance

The results of the survey indicated that the number and ownership of motorized and non-motorized vehicles increased after the road was upgraded and subsequent routine maintenance provided through the *Siyatentela* programme. In addition, public transport availability improved – especially buses and minibus taxis. A total of 37 percent of the interviewees were of the opinion that vehicles using the *Siyatentela* roads had increased (although not verified by a ‘before and after’ count). In addition, a variety of public transport modes became available to ferry passengers to the main centres, in contrast to the ‘before’ situation when mostly buses and light delivery vehicles with higher clearance constituted the public transport modes.

In terms of local women’s perceptions of the impact of the road upgrading and routine maintenance on access to other services, the overwhelming evidence suggests a positive correlation between the improved roads and easier access to socio-economic opportunities such as education, health, police and social networks. The improved roads also allowed better response times of emergency vehicles (ambulance and police). For example, more than 80 percent of the respondents indicated that access to educational, health and police facilities had improved.

3.2.7. Other experiences and perceptions of women employed in the programme

Most women reported that they walk to the *Siyatentela* project roads, which takes 33 minutes on average (with a few exceptions requiring more than an hour). The loosely constituted women’s groups do not entertain leadership positions to ensure that all the women are equal and putting in an honest day’s work; this thwarts the emergence of divisions among them.

A total of 85 percent of the women received a one-day on-the-job training covering the actual work they need to perform as well as an introduction to the philosophy of and rationale for road maintenance.

A total of 93 percent of respondents stated that training improved their skills and capacity not only to work in the *Siyatentela* programme, but also to employ their newly learned skills elsewhere, for example in their homes – building water drains, cleaning gutters, removing litter around their households and keeping the home neat and tidy.

3.2.8. Key project-related challenges identified by the women

- Twenty percent of the women respondents were worried by the irregular payment. Given the crucial importance of stable employment in enhancing women’s socio-economic position and reducing poverty, this issue was discussed with the relevant authorities and ways in which to improve the situation were identified.
- Twelve percent of women respondents walked distances of between 2 km and 5 km to reach their work stations – a cumbersome exercise indeed.
- Nine percent of the women respondents suggested that their remuneration be revised to between R1 000 and R1 500 per month.
- Seven percent of the women respondents complained about the lack of adequate tools and uniforms. They argued that working with inadequate tools and incomplete

uniforms was not only hazardous, but also encouraged inefficiency and circumvented the recognition that derives from wearing a complete uniform.

- Seven percent of the women respondents complained about having to burn unpleasant and at times explosive or dangerous materials (often dumped with the rubbish along the road) without the benefit of masks and eyeglasses as protection against dust, fumes, glass and other dangerous materials.
- Five percent of the women respondents said that working conditions needed improvement. They observed that it is hard to work in inclement weather and with the dust resulting from their work and passing vehicles.
- Five percent of the women respondents indicated that balancing paid employment and child care was a challenge. However, this was also mitigated to some extent by the flexible times that they work.
- Some women expressed their fear of the threat of rapists and thugs when walking to and from work and while working on the roads.

The question of occupational health, both in training and in the provision of adequate protective gear, clearly needs to be addressed. In terms of the problems associated with the threat of rape and assault, project supervisors resolved to have the women work in groups. However, this was not entirely successful.

“...The original arrangement was that each woman would work on a 500 m stretch of the designated road and because of these problems (such as rape, thieves, snakes, etc.) we decided that they should work in groups. This would assist them in defending each other or calling for help in case of any attack. However, this didn't work well with some groups, as some women complained that some of their co-workers were not working hard enough...” (Supervisor from Albert Luthuli Municipality, March 2008).

3.2.9. Suggested changes to the programme by respondents

A total of 31 percent of the women respondents suggested increases in pay, timely payment and the opportunity to increase work hours in order to earn more as ways in which the programme would be improved. The latter is a sensitive issue, given that there is a tension between the need to spread the opportunity to earn income to more households, which implies allotting fewer hours per household, and the need to improve the income of those already working and therefore depriving others of the chance to engage in paid employment.

Without exception, the consensus from all women was that *Siyatentela* programme was beneficial for participating households. They also felt that the programme as currently constituted was indeed fair in targeting women only. They argued that women often bear, sometimes single-handedly, the poverty burden, and that it is women who are generally expected to provide for their families. However, given that households that do not have women are currently not considered for the project, some of the key informants interviewed felt that there were also men and youths in dire need of such opportunities to earn income, especially orphaned youths. They argued that while women may often be those with the greatest need, there is a need to reassess the selection criteria for the project to respond to other patterns in terms of poverty and vulnerability in rural areas.

4. Recommendations and conclusions

4.1. Recommendations

The common thread that runs through *Zibambele*, *Gundo Lashu*, *Siyazondla*, *Sakhi Isizwe* and *Siyatentela* transport and agriculture programmes is the relatively significant positive impact they have had on improving rural livelihoods in KwaZulu-Natal, Limpopo, Eastern Cape and Mpumalanga provinces of South Africa. The need to scale them up can not be overemphasized. Given that these types of programmes are management-intensive, it is important to grow a cadre of skilled overseers to enable enhanced outcomes. However, challenges exist particularly with regard to dire shortages of skills in science, engineering and technology to assist with technology and skills transfer. In addition, funding constraints are bound to severely truncate the rate and pace of scaling up and replication that may be desired. Furthermore, the lack of standard datasets for evaluation often makes it difficult to engage in direct comparisons across programmes. The main recommendations to ensure success in the scaling-up process include:

- developing a strategic approach and plan to scaling up;
- establishing a sustainable management information system;
- generating a communication strategy (including employing existing success stories such as *Siyazondla*, *Gundo Lashu*, *Sakha Sizwe* and *Siyatentela* as models);
- putting in place a systematic monitoring and evaluation programme.

4.2. Concluding remarks

Women, children and youth comprise a significant proportion of the indigent population in rural South Africa and can be instrumental in breaking the poverty cycle. Empirical evidence from the *Siyatentela*, *Zibambele*, *Siyazondla*, *Gundolashu* and *Sakha Isizwe* case studies as well as other similar projects suggests that, besides creating employment opportunities for those least able to compete on the job market, bolstering women's incomes, productivity and empowerment is pivotal in positively transforming the rural socio-economic landscape in favour of sustainable livelihoods.

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The consequences of labour out-migration on income, rice productivity and gender roles: Synthesis of findings in the Philippines, Thailand and Vietnam

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1. Introduction

Around 70 percent of the population in Southeast Asia lives in rural areas and depends on agriculture. However, the share of agriculture in gross domestic product has declined, agricultural labour productivity growth is decreasing and productivity gaps remain wide. Low product prices and high input prices have also made agriculture less attractive. The result: low growth in agriculture and lower incomes for the people dependent on it. Although agriculture, especially rice farming, is still the largest employer, its capacity to generate new employment is falling. In East Asia, Southeast Asia and the Pacific, it now has less employment potential than industry or services (UNESCAP, 2008). Out-migration from rural areas is now increasingly becoming an important livelihood strategy and escape out of poverty. Migration is a safety net against income shortfalls because of crop failure or low productivity created by drought or floods. In addition to deteriorating employment opportunities at home and better prospects in urban areas, the increased mobility of the population from the rural areas is also a result of improved communication and road networks (Deshingkar and Anderson, 2004).

Policy-makers are often concerned that out-migration of labour from agriculture might reduce crop production and endanger food security. On the other hand, remittances may facilitate on-farm investment or relieve credit constraints that impeded farmers from buying fertilizer or other key inputs. The unresolved question concerning migration and agricultural production is whether remittance incomes enhance production enough to compensate for the reduced availability of male or female labour in any specific setting and improve intra-household welfare (better education of children, reduction in women's workload, empowerment of women, etc.). Although there have been numerous studies on migration, what has not received much attention is how this process affects the family members left behind, especially women. According to Hugo (1993), migration has potentially far-reaching effects on household structure by increasing the incidence of female-headed households through sex-selectivity of migration. However, although there has been much talk about the "feminization" of agriculture and increasing female-managed farms because of increasing male migration and participation in non-farm work, data that support this contention are patchy and anecdotal. The reduction in the

supply of male family labour because of participation in non-farm work and migration will have repercussions on the management of the farming systems, rice production and intra-household welfare, particularly on women's roles and responsibilities. There are knowledge gaps in relation to the effects of migration on gender roles. There is a need to anticipate the likely implications of this trend and to prioritize research and policy interventions that can improve the well-being of members of farming households, especially of women farmers who are left to manage the farms.

In this paper, we are especially concerned with improving the understanding of migration's contribution to the livelihoods of rice-farming households and its effects on women left behind to manage farms.

The specific objectives of this research are to:

- determine the incidence and patterns of work-related migration in major rice-based farming systems in the Philippines, Thailand and Vietnam;
- assess the contribution of remittances to household income and of migration to rice productivity and the labour participation of men and women in rice production;
- examine the key constraints faced by women in managing farms;
- identify training needs and technology solutions to overcome these constraints;
- recommend gender-responsive policies and women-friendly rice-related technologies which can provide rural livelihood opportunities and empower poor rural women.

This paper is divided into six sections. Section two discusses the methodology for achieving the objectives. Section three presents the research findings and section four provides examples of training activities that can enhance women's technical knowledge and skills. Section five presents a summary and conclusions. Finally, section six provides recommendations to help women from farming households which have male migrants.

2. Methodology

To address the five objectives, this study used a number of methodologies. It is important to note that in this study, migration is defined as the move or change in residence of an individual (rather than an entire family) for a continuous period of three months or longer. Labour movement within a village and other villages for employment on a daily, weekly or monthly basis was classified as non-farm activity.

Literature review. A review of literature on migration, agricultural productivity and gender roles was conducted separately in the Philippines, Thailand and Vietnam. Secondary data and information on the study areas (districts and villages) were gathered.

Selection of study sites. The study sites were selected in consultation with local government agencies. The selected study sites in the Philippines were Pangasinan, Bulacan and Bicol, which are located in Luzon Island. In northeast Thailand, villages in Khon Kaen and Udonthani, which represent rainfed and irrigated rice production systems, were selected. In Vietnam, the study was conducted in villages located in Vinh Phuc province in North Vietnam, and in Tien Giang, Long An and Ben Tre provinces of the Mekong Delta in South Vietnam. Except for North Vietnam, which represents irrigated areas only, selected

villages in South Vietnam have both rainfed and irrigated rice production systems. All of the study villages grow rice during the wet season. Farmers who have access to irrigation facilities grow two to three crops of rice per year. Vietnam has the highest rice-cropping intensity index but has the lowest rice area (less than one hectare). The average rice area in the Philippines and Thailand is less than two hectares. A household has about five to six family members. Other non-rice crops are grown during the dry season, depending upon the availability of residual moisture or limited irrigation.

Data collection. A rapid rural appraisal and census of farming households in 48 villages in Thailand, 46 in the Philippines and 42 in Vietnam were conducted to determine the incidence of individual migration in rainfed and irrigated villages. Village-level information included the characteristics of the village, typologies of households (social differentiation), agriculture-related information, proximity to a labour market, occurrence and nature of participation of family members in farm, off-farm and nonfarm work and other migration-related information.

Focus group discussions with key informants were conducted to elicit perceptions on migration and its consequences on agriculture and family welfare.

Extensive household surveys were also conducted. Villages were selected based on the rapid rural appraisal. Households were selected through proportionate sampling according to the number of households in a village. The number of households with and without migrants that participated in the survey was 831 in Vietnam, 830 in Thailand and 813 in the Philippines. A structured pre-tested questionnaire was used, made up of two parts: Part one includes farm-household information, migration-related information, perceptions on the impact of out-migration on crop production and livestock, amount of remittances received from male and female migrants, disbursement of remittances, sources of household income, amount and value of assets and land ownership. Part two includes agricultural information and labour use by gender in major rice operations. Descriptive analysis was conducted by comparing and analysing differences between households with migrants and without migrants.

Identification of constraints of women left behind. Principal women whose husbands migrate were interviewed to identify constraints they faced in managing their farms. To overcome these constraints, technology and training needs were listed and prioritized by the research team for implementation.

3. Findings

3.1. Incidence of migration

We hypothesize that more people from rainfed villages migrate to other areas due to several 'push' factors such as higher risks in crop production, unemployment resulting from low cropping intensity and low productivity, and poor infrastructure facilities. Results show that migration occurs not only in the rainfed but also in the irrigated production ecosystems. But migration is more prevalent in the rainfed villages. The incidence of migration is higher in northeast Thailand than in the Philippines and Vietnam. In Thailand, 63 percent and 54 percent of the households from the rainfed and irrigated villages, respectively, have at least one migrant. In the Philippines and Vietnam, about a quarter of the households have one or more migrants. The factors that have impacts on

TABLE III-8
Incidence of migration

Rates of out-migration	Thailand		Philippines		Vietnam	
	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated
HMR	63	54	26	22	24	20
MMR	34	26	20	22	25	34
FMR	23	20	34	21	13	5
Total households	1 197	789	3 062	2 861	462	2 668
Total adult males	2 433	1 546	728	1 361	1 039	5 394
Total adult females	2 467	1 637	754	1 433	1 047	5 486

Source of data: rapid rural appraisal and census of farming households, 2004.

Household migration rate (HMR) = number of farming households with at least one adult migrant divided by the total number of farming households in the area (sample size).

Male migration prevalence rate (MMR) = number of adult male migrants in the area (sample) divided by the total number of adult males in the area (sample).

Female migration prevalence rate (FMR) = number of female migrants in the area (sample) divided by the total number of adult females in the area (sample).

migration in Vietnam are population and employment pressure, industrialization and urbanization. However, industrialization and urbanization have not only taken place in the big cities; this process has also occurred in many other different localities. In northeast Thailand, riskiness in farming due to unreliable rainfall distribution, drought, unemployment and poverty are factors which push the members of the farming population to the cities and other rural areas. In the Philippines, education and social networks are two of the pull factors, while unemployment, low wages, low profitability in farming and lack of infrastructure facilities are some of the reasons why people leave their villages for 'greener pastures'. The interest to leave the country is not only limited to the elderly but is also found among children, who wish to work abroad someday (Asis, 2006).

Our findings also reveal that the rate of male migration is higher in the rainfed than in the irrigated villages in Thailand and the Philippines. Female migration rates are higher in the rainfed than in the irrigated villages. Across countries, the prevalence of female migration is highest in the Philippines, followed by Thailand and then Vietnam.

3.2. Patterns of migration

Based on the extensive farm household surveys in the Philippines and Thailand, a higher proportion of adult sons and daughters migrate than their fathers. A similar trend is found in South Vietnam. We expect that rice productivity remains the same and labour out-migration will not affect the family labour supply. In contrast, in North Vietnam a higher proportion of principal males migrate than sons, while the principal females are left behind to manage their farms in addition to their household and child care responsibilities.

The migration pattern based on the place of destination depends on the availability of jobs in the place of destination. A higher proportion of the migrants in Thailand and Vietnam are engaged in rural-to-urban migration than rural-to-rural migration. In contrast, international migration is most prevalent in the Philippines, particularly migrants from

the rainfed villages. In Vietnam, rural-to-urban migration is more prevalent among farming households from the rainfed villages. In contrast, in the irrigated villages, an almost equal proportion of the migrants work in the rural and urban areas. International migration in Vietnam is nil.

Migrants leave their villages for better employment and income opportunities. In the Philippines, a higher proportion of the international male migrants than female migrants are employed in the service sector (e.g. airplane, ship, cargo) and factories. Male migrants are employed in the Middle East, Korea, Taiwan and other countries. On the other hand, female overseas workers are employed as domestic helpers, caregivers and factory workers in Italy, the Middle East and Singapore. Migrants prefer to work overseas because they receive higher remuneration and benefits than in their own countries.

In Thailand, almost half of the male and female migrants are engaged in farming in their villages, but only about 10 percent of them are hired in agricultural jobs and about half of them are employed in unskilled jobs at their new work place. Slightly more than one-fourth of them work as salespeople in stores.

In South Vietnam, male migrants work as hired agricultural labourers, factory workers, construction workers and masons in cities, as hired fishermen in sea fishing, and in shrimp or squid catching in other provinces. Women work mainly in factories, in waste trading and small trading, as hired labourers in rice farming, as sand-boating workers, domestic helpers, and factory workers, or in other industrial areas near rural areas.

3.3. Contributions of remittances to household income

Every year, rice farmers who grow rice under rainfed conditions are faced with uncertainty and risk. Rainfall distribution is highly variable and unpredictable. Drought occurs during the vegetative phase of rice growth, which causes losses or low yields. This situation is exacerbated by the predominance of marginal and small landholdings. Consequently, farming households derive their livelihood from diverse sources of farm income (rice, non-rice, livestock, rental fees from land, animals and machines), off-farm activities (income from wage labour on other farms) and non-farm activities (employment activities within and outside their villages without changing residence). In income analysis, remittances are most often classified as non-farm income. However, since this research focuses on income from out-migration, remittances were disaggregated from non-farm income.

Table III-9 shows the share of the different sources of livelihood and average household income. Average household annual incomes of households with migrants are almost twice those of households without migrants in the Philippines and Thailand. In Vietnam the incomes are almost the same. Remittances from migrants comprise a significant share of the total household income in the three countries. The share of remittance income is highest in the Philippines (59 percent) mainly due to international migration. In Thailand and Vietnam, remittances are 38 percent and 36 percent, respectively, where rural-to-urban migration is more prevalent (brought about by rapid industrialization and transportation facilities). Remittance earnings compensate for lower income from rice in the Philippines and Thailand. On the other hand, in Vietnam, remittances compensate for lower income from other crops and lack of other non-farm income opportunities within the villages. It is interesting that households without migrants have much larger sources of non-farm income than migrant households in all three countries. However, the data do not indicate whether non-migrant households develop non-farm livelihood activities

TABLE III-9**Share of different sources of income**

(percent) and household income per year

Source of income	Thailand		Vietnam		Philippines	
	WM	NM	WM	NM	WM	NM
	(n=268)	(n=295)	(n=304)	(n=346)	(n=321)	(n=349)
Remittances from migration	38		36		59	
Cash income from rice	12	19	37	49	17	36
Cash income from other crops	16	21	2	1	a	
Off-farm	4	8	2	4	2	2
Non-farm	21	45	10	25	20	57
Capital gains from land and non-land assets	1	1	a	a		a
Income from livestock	8	6	13	21	2	5
Total	100	100	100	100	100	100
Annual household income (USD)	2 541	1 842	1 411	1 306	2 857	1 512

WM - with migrant; NM - no migrant; a - less than 1%

because they can not engage in migration, or they do not wish to migrate because they have a satisfactory range of farm and non-farm income sources. Nonetheless, these findings reveal that migration is a routine livelihood strategy of poor farming households, helping them to smooth seasonal income fluctuations and earn extra cash to meet contingencies or increase disposable income, particularly in the rainfed villages.

Off-farm income refers to the income obtained by male or female household members from wages paid in cash or wages in kind by working as hired labourers in different farm operations in other farms. Non-farm income refers to income received by family members by working within and outside the villages without a change in residence. Earnings classified under non-farm income include those from retirement pensions, buy-and-sell small businesses and services and other earnings from household members who commute daily for non-farm jobs.

3.4. Contributions of remittances to household welfare

The contributions of remittances to household welfare depend on the amount of remittances sent by migrants to their families. Migrants allocate their earnings for their personal expenditures in their place of destination and send the rest to their families. Migrants from the Philippines send the highest amount (about US\$200 per month) while Thai migrants send less than US\$100 per month. Vietnamese migrants send the lowest remittances, at less than US\$50 per month. As mentioned earlier, international migration is prevalent in the Philippines, rural-urban in Thailand and Vietnam. Thus, we expect remittances to have greater positive outcomes on family welfare in the Philippines than in Thailand and Vietnam.

How are remittances used by farming households left behind? It has been widely observed that the investment of remittances into productive uses is limited, and consumption spending is greater. But this is not necessarily a problem as consumption can include a variety of uses which may have a positive impact on well-being and multiplier effects in the economy. Based on this study, remittances are mainly used for food and other daily expenditures, particularly in the Philippines and Thailand.

In the Philippines, next to food expenditures, families spend the remittances on children's education and farm inputs. For migrant parents, providing an education for their own children is a priority. Because of strong family ties, unmarried female migrants are expected to pay for the education of other close relatives, including nephews and nieces. Migrants also take care of the health care needs of ageing parents, since public health in the Philippines, particularly in the rural areas, is considered to be quite poor and the costs of medicines too high. A study on Filipino migrants in Italy (INSTRAW, 2008) revealed that it is the investment of remittances in agricultural production that has offered greater food security to remittance-receiving households. This is due in part to the fact that remittances allow farmers to purchase the necessary inputs (e.g. fertilizers, pesticides), pay for irrigation expenses, pay for hired/contractual labourers or purchase livestock. This permits farmers to stock the rice requirements for a year, particularly farmers with rainfed plots who harvest only once in a year.

In Thailand, remittances are also used for repaying debts, purchasing farm inputs and paying for children's education. A study in Khon Kaen province (Aimimthan *et al.*, 2002) reveals that migrants had to pay high interest rates in paying off debts to recruitment companies. More children or dependents in migrant families were enrolled in school than before due to remittance earnings.

In Vietnam, families in the South spend their remittances on food and farm inputs while those from the North keep much of the remittances as savings for future investments, and less so for food expenses. In general, once the basic needs of the households with migrants are met, construction or renovation of a house is generally a common investment, as is the purchase of consumer durable goods.

3.5. Out-migration and rice productivity

The effects of labour out-migration on rice productivity can be mixed. On the one hand, migration might reduce labour supply and farm output. Farm output can later increase if the absence of some family members is compensated by the reinvestment of remittances on farm inputs or by helping ease cash and credit constraints. The performance of a crop can be attributed to many factors, such as the environment, quality of land, labour, capital and managerial ability of the farmer. Effective farm management depends on the education of the farmer, experience, technical knowledge, access to inputs, incentives and family support. Rice productivity itself is influenced by many factors, such as varieties used and crop and resource management practices. If remittances come on time, the farmers can use the available cash to purchase inputs and hire additional farm labour to complete the labour requirements on time and also relieve female family members from drudgery.

To assess the effects of out-migration on rice productivity, we compared the average rice yields of households with and without migrants by production systems (rainfed and irrigated) during the wet season. Results revealed that households with migrants have higher average yields than those without migrants during the wet season for the

irrigated villages included in the study, except in Thailand. These yield differences are statistically significant. In the rainfed villages, average rice yields are almost the same between the two groups. However, these differences are not statistically significant. Thus, based on these comparisons of average yields between the two groups, out-migration did not lead to a reduction in rice productivity. In the rainfed villages in Thailand and Vietnam, households with migrants use more family than hired labour. Family members left behind take over the field operations and farm management responsibilities.

3.6. Out-migration and workload of men and women left behind

What happens to women's workload when men migrate? Palmer (1985) cited many issues for women left behind, one of which is the increase in the work burden of women, depending on who is left behind. In Thailand, principal females had been engaged in their traditional tasks as unpaid workers and as managers with a limited budget, arranging for hired labourers and borrowing money from private lenders. Thus, migration did not change their participation in field activities. However, the principal females revealed that their work burden and farm responsibilities increased. They had to manage the day-to-day farm activities and make crop management decisions aside from household management when their husbands worked outside the villages for extended periods.

In Vietnam, the labour contributions of principal females increased. In addition to managing all operations, they also look for labourers to hire during peak cropping operations. During peak cropping season, wage costs increase and hired labourers are difficult to find. To cope with this problem, women exchange labour with women from other households. The important activities that increase wives' workload when husbands leave are irrigating the fields, dredging field canals, applying fertilizer and spraying pesticides and transporting paddy sacks from the fields to their house and to the market. Thus, the farm managerial responsibilities of the principal women increased due to the migration.

3.7. Constraints faced by women left behind in managing farms

When principal female members left behind were asked whether they had encountered problems in managing their farms, at first they said they had no problems since they had long-term experience in farming. However, after building a rapport with them during the interviews, they said that they faced several constraints in managing their farms and great pressure to maintain rice yields due to the absence of their husbands. They feel the stress in allocating the limited budget for the household, farm inputs and other major expenditures such as children's education.

In the Philippines, they complained of high costs of inputs (seeds, chemicals, hired labour, irrigation) and a low paddy price, especially during the harvest season. They are especially concerned about improving post-harvest practices, which is their domain. Similarly, in Thailand, they complained about the high costs of fertilizer and herbicides to control weeds, especially in direct-seeded plots. They also had problems with snails, which damage young rice seedlings; low yields due to drought; and a reduction in paddy area because of increasing area cultivated for other crops (sugar cane, eucalyptus, cassava). The costs of chemical fertilizer ranged from 45-55 percent of the total costs of farm inputs in this study (with and without migrants) in both irrigated and rainfed villages.

In Vietnam, they complained of a lack of capital to pay for hired labourers and cash to buy material inputs since remittances were small. They also complained of high costs of inputs such as seeds, chemical fertilizer and pesticides. The high costs of inputs can be addressed by improved crop management techniques through rice technologies. However, based on the in-depth interviews in the study villages, the women do not have access to information on improved crop management techniques, particularly in relation to reduced use of inputs without reducing rice yields. They rely on their neighbours (and input dealers) for information on the use of inputs and pest management.

4. Enhancing women's technical knowledge and skills

Based on the above-mentioned constraints, the research teams organized several training programmes that focused on efficient use of inputs in rice production. In these training activities, the invited participants are mainly the women *de facto* heads of households among the households with migrants. However, in the Philippines, several husbands who were present in the village during the time of the surveys participated in the training. A series of village classes were conducted on improved rice production management, with a focus on improving farmers' rice seed health practices. Extension guides on "Improved Seed Health Improvement Practices" were distributed to the agricultural extension officers and participants. After the training, the participants compared the selected (healthy) seeds with the unselected seeds in their own plots. This gain in knowledge led to yield gains of 5-10 percent.

In Thailand, the team organized field trips and training courses for women on technologies which can reduce the cost of chemical fertilizers and herbicides. Staff from the Land Development Department and experts from the Faculty of Agriculture, Khon Kaen University trained the women, their husbands who migrate on a seasonal basis and village committee members on the production and application of liquid biofertilizer and bioinsect repellent using local herbal plants to control weeds in the fields. For the first time, the women were direct recipients of training courses designed to address the constraints they face in managing the farms, especially when their husbands are away for long periods. After the training, they gained more knowledge and information on how to better manage rice production from seed to seed, use inputs more efficiently and reduce costs, which are necessary in making sound decisions.

In Vietnam, the research team organized a series of training programmes at the three study sites on the onset of the wet season. Women received technical knowledge on integrated pest management and the three "Rs" (reduce seeds, reduce fertilizer and reduce pesticides), and were provided with seeds of new varieties. At the rainfed sites, the women used to grow long-duration rice varieties. However, after the training they shifted to short-duration (i.e. three-month) varieties. They also reduced the amount of insecticide sprays, fertilizer and seeds. They were able to save 350 000 to 400 000 dong/ha (US\$22-25) because of the reduction in the cost of inputs. Average yields increased from four to five tonnes/hectare. In the irrigated villages, the women are already growing short-duration varieties. However, after the training they reduced the amount of urea, increased the dosage of potassium, and reduced the number of insecticide sprays and seed rates. Yields increased during the wet season.

5. Summary and conclusions

This migration study was based on surveys of farming households with and without migrants in the Philippines (813), Thailand (830) and Vietnam (831). Our findings reveal that the incidence of migration is highest in northeast Thailand (63 percent). In the Philippines and Vietnam, about a quarter of the farming households interviewed have at least one migrant. In the Philippines and Thailand, a higher proportion of adult sons and daughters migrate than their fathers. In contrast, in North Vietnam a higher proportion of fathers migrate than sons, while the mothers stayed behind to take over their field work responsibilities and management of the household and farm. Average household annual incomes of households with migrants are almost twice those of households without migrants in the Philippines and Thailand. In Vietnam, average household incomes between the two groups are almost the same.

Remittances from migrants comprise a significant share of the total household income in the Philippines (59 percent) mainly due to international migration. In Thailand and Vietnam, remittances are 38 percent and 36 percent, respectively, where rural-to-urban migration is more prevalent (brought about by rapid industrialization and transportation facilities). Remittance earnings compensate for lower income from rice in the Philippines and Thailand. On the other hand, in Vietnam remittances compensate for lower income from other crops and lack of other non-farm income opportunities within the villages. Remittances are mainly spent on food and daily expenditures, children's education, farm inputs (hired labour, material inputs) and debt repayments.

In Thailand, principal females continued to contribute significantly in field activities. In Vietnam, labour out-migration resulted in fluidity in gender roles as the principal females who were left behind took over the tasks traditionally done by the principal males, such as irrigating the fields, preparing the dikes, applying pesticides and hauling farm products. In contrast, in the Philippines, the principal females withdrew from field activities and are more engaged in managing their farms and non-farm income-generating activities. Rice yields among migrants did not decline; thus migration led to positive consequences on production.

In all three countries, women's farm managerial responsibilities increased with migration. They will play greater roles as farm managers in the future, unless rural development takes place and reduces the outflow of rural labour. Agricultural research and extension institutions can play an important role by enhancing the technical knowledge and skills of women, especially of female *de facto* heads of households. These can be effective strategies in increasing rice productivity, ensuring family food security, and alleviating poverty in a context of out-migration.

6. Recommendations

To help women from households with male migrants increase farm production and improve livelihoods, the following needs to be addressed:

- Principal females left behind to manage the farms should be included in participatory research dealing with rice-variety improvement and associated crop management technologies which can reduce costs of production. They should also be direct beneficiaries of agricultural extension services.
- Government assistance to agriculture and agricultural microcredit should be channeled through women to effectively reach the entire household.
- Programmes that combine technical with organizational and leadership skills are effective in building social capital. Thus, research and development workers should facilitate the formation of women's groups to sustain adoption of different income-generating activities. One strategy would be to train rural women as local agricultural extension workers who can transfer their knowledge to other women.
- Women should be given opportunities for technical education that can build their entrepreneurial skills for self-employment and wage employment.
- The value chain of farm products should be studied to identify opportunities for enhancing women's roles in marketing and dissemination of information.

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Assessing the impact of gendered labour markets in the rural Philippines

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1. Introduction

Are different types of resources within the household associated with different household welfare outcomes? Does access to economic resources accrued through paid off-farm labour have a different effect on children's well-being? Does the identity of the earner of labour income affect household welfare and household members differently? This study aims to provide an insightful contribution to the literature by addressing these questions in a rural, developing-country context. Specifically, this paper aims to assess the relationship between women's participation in paid off-farm activities and children's welfare outcomes such as nutritional status.

This issue is particularly relevant in rural environments where non-agricultural activities have become increasingly important as an *ex-ante* mechanism to diversify risk and reduce vulnerability. The average share of non-farm income in rural households' total income is about 40 percent in Latin America (Reardon, Berdegue and Escobar, 2001), 35 percent in Asia and 45 percent in Africa (Reardon *et al.*, 1998), and it is estimated that about 36 percent of the rural workers in Latin America, 25 percent in Asia and 11 percent in Africa are employed in rural non-agricultural activities (Haggblade *et al.*, 2002). Diversification into non-agricultural employment has a gender dimension as well; women's participation in non-agricultural activities is high and has been increasing substantially over time. Out of the total number of workers employed in non-farm activities, 25 percent in Africa, 27 percent in Latin America and 20 percent in Asia are women (Haggblade *et al.*, 2002). These estimates do not include part-time or seasonal activities, which suggest that the importance of women's participation in non-farm activities may be even higher.

In addition to the increasing importance of women's participation in non-agricultural activities, off-farm work has other characteristics that distinguish this type of income-generating activity from other types of labour, particularly for women. Off-farm work represents a more stable source of income than farm work since it is not as seasonal and volatile as agricultural work, and it is usually associated with greater control over earnings by the income earner (income from agriculture is usually perceived as the household's income rather than a particular individual's income); however, it is rather inflexible since it requires women to spend a certain number of hours working outside the home and usually limits the mother's ability to perform caregiving activities herself.

Hence, because of the growing importance of non-agricultural activities in rural settings, the increasing participation of women in these activities, and the particular characteristics associated with this type of labour, this analysis will focus on testing the relationship

between women's employment in non-agricultural activities and children's well-being in the rural Philippines. This country provides an interesting setting in which to examine the gender dimensions of labour and employment because it is a relatively egalitarian society with respect to gender roles (Bouis and Peña, 1997, Estudillo, Quisumbing and Otsuka, 2001 and Quisumbing, Estudillo and Otsuka, 2004). However, despite the generally gender-egalitarian nature of Filipino society, there are marked differences in men's and women's labour market participation, as well as sector of employment. In January 2008, while the labour force participation rate of men was much higher than women's (78.5 percent vs. 48.4 percent), the unemployment rate of women (6.7 percent) was lower than men's (7.8 percent).⁶² Occupational segregation is also evident: in 2006, 68 percent of the population employed as professionals and 64 percent of clerks were women, while about 85 percent of the workers employed in agriculture were men.⁶³ In fact, the number of women employed as government officials, clerks, professionals and service workers was higher than that of males from 2001-2006, while the number of women employed in agriculture was significantly lower than men for the same period of time. This shows that women's participation in non-agricultural activities is of great importance in the Philippines.

This paper is structured as follows. Section two reviews the literature devoted to testing the relationship between women's access to economic resources and children's welfare. Section three briefly describes the data used in this analysis. Section four explains the empirical approach and section five reports the main findings. Finally, the conclusions and policy implications are discussed in section six.

2. Women's access to economic resources, labour participation and household well-being

There is now substantial empirical evidence showing that women's access to economic resources is beneficial to household members and particularly to children (Thomas, 1990; Hodinott and Haddad, 1994; Phipps and Burton, 1998). However, does women's access to paid off-farm income have the same effect? Unlike the studies that assess the relationship between women's access to physical resources and children's well-being, there is no clear consensus in the literature about the effect of women's paid work on children's welfare (Glick, 2002). In general, this ambiguity is attributed to the presence of two opposite effects associated with paid employment: there is a positive effect because of an increase in household income associated with mothers' paid work, which we will call the *income effect*; and there is a negative effect because of a decrease in the amount of time allocated to unpaid housework, particularly to child care (Popkin, 1983), which we will call the *time effect*. Thus, the net effect of women's paid employment on household welfare is uncertain and depends on whether the effect of time or income dominates and the context in which it is being analysed.

The empirical evidence portrays this ambiguity through the diversity of results. Some studies such as Popkin (1983) in the Philippines, Sonalde and Jain (1994) in India and Wandel and Holmboe-Ottesen (1992) in Tanzania find that women's work does not have

62 National Statistics Office: <http://www.census.gov.ph/data/sectordata/2007/lf070126.htm>

63 See http://www.phil-lmi.dole.gov.ph/lmi/philLMI_2.htm and http://www.phil-lmi.dole.gov.ph/lmi/apec-lmi/d06_001to027_emp_occ_sex.html for Philippine labour market information.

a significant effect on children's welfare. Other studies, such as those conducted by Lamontagne *et al.* (1998) for Nicaraguan households and Vial and Munchnik (1989) in Chile, find that women's work has a positive effect on children's welfare. These results contrast with Chutikul (1986), who finds that women's work in the formal sector is related to child malnutrition in Thailand, or Rabiee and Geissler (1992), who find that, despite having a higher socio-economic status, children with mothers who work more than three hours per day away from home face lower levels of nutrition than children with mothers who work less than three hours per day in Tagengokey, Iran. Similarly, Alderman (1983) finds that the hours that women spend in paid work are associated with lower levels of children's welfare in Peru. The inconclusive evidence about the relationship between women's access to resources obtained through paid labour and a household's well-being suggests that it is essential to understand the gendered patterns of employment in different economic sectors, the types of employment performed by women, and the intensity of their labour. This paper attempts to draw from both threads of the literature in order to understand whether women's participation in paid off-farm activities affects household welfare differently than other types of labour.

3. The data

In order to test the hypotheses presented in section two, this study uses a unique longitudinal data set that was collected in Bukidnon province in Northern Mindanao, Philippines, by the International Food Policy Research Institute (IFPRI) and the Research Institute for Mindanao Culture, Xavier University (RIMCU).⁶⁴ This data set consists of two waves of data that were collected 18 years apart. The first wave of data was collected in four rounds which were conducted four months apart in 1984-1985 and initially included 510 households, of which 448 were interviewed in all four rounds. These households were selected using stratified random sampling among corn and sugar producers with at least one preschool child (five years of age or younger). The second wave of data collection, conducted in 2003-2004, was designed to interview all traceable original respondents, a maximum of two split households located in the same village (households of non-co-resident children from parents of the original sample), and at least one household formed by children from the sample of original parents but who had migrated outside the village.⁶⁵ The second wave of data provides information on 311 households (61 percent of the original households), 261 split households and 231 migrant households. The second wave of data was collected in 2003 for the original and split households and in 2004 for the migrant households. However, because we are interested in looking at demographically similar households (i.e. households with preschoolers), we will not use the information collected on the original parents in 2003, most of whom no longer have preschoolers. Only the households of the children from the original parents are included (split and migrants). After dropping the households without sons or daughters five years old or younger, as well as children with non-feasible z-scores, we have a final sample of 382 households and 618 children in 1985, and 294 households with 415 children in 2003.⁶⁶

64 See Quisumbing and McNiven (2005) for a detailed description of the 2003-2004 data and sample design.

65 Budgetary constraints prevented tracking all migrant children, so the team tracked children who had migrated to other areas in rural Bukidnon, nearby areas of Davao and Cotabato (adjacent provinces), urban centres in Bukidnon, and Cagayan de Oro, the major metropolitan centre of Northern Mindanao, located in the province of Misamis Oriental.

66 In 1985, 29 children (4.4 percent) did not have biologically feasible z-scores. In 2003, 11 children (2.6 percent) did not have biologically feasible z-scores.

In general, the households in our sample are poor households who allocate most of their labour to agricultural activities, particularly sugar and corn cultivation. They are large households with very few facilities in their dwellings. On average, mothers from these households are younger and more educated than their male counterparts and seem to be moving away from agricultural employment to obtain jobs as salespersons, housemaids, bookkeepers, etc. Despite the higher levels of education, women seem less likely to participate in paid non-agricultural activities than men.

We found that parents had very different labour participation patterns between the two periods. In 1985, about 28 percent of the mothers participated in paid non-agricultural activities (wage activities or non-agricultural owned business) while 34 percent participated in paid agricultural activities. In 2003, we find that 28 percent of women participated in paid non-agricultural activities and only 14 percent participated in paid agricultural activities. In 1985, 46 percent of the fathers received non-agricultural wages and 71 percent received agricultural wages, while in 2003, 62 percent of the fathers received non-agricultural wages and only 37 percent received agricultural wages. For both periods, men are more likely to be employed in either activity. Since paid non-agricultural activities include individuals who perform wage work or work in family business, we find that in both periods, a greater percentage of mothers work in non-agricultural family-owned business while most of the male heads of households participate in non-agricultural wage activities. Regarding the occupations performed by gender in 1985, 16 percent of the women were teachers, 10 percent were municipal officials, 12 percent were agents or salespersons, 10 percent were beauticians and 2 percent were housemaids. Men were mainly employed in construction (10 percent), carpentry (8 percent) and as bus drivers (5 percent). In 2003, we find that women are mainly employed as salespersons (16 percent), teachers (18 percent), municipal or government officials (12 percent), bookkeepers (9 percent) and housemaids (6 percent), while men are mainly employed as bus drivers (13 percent), carpenters (9 percent), security guards or military (9 percent) and cab drivers (7 percent). With respect to earnings from waged non-agricultural activities, we can not reject the hypothesis that women and men earn the same annual or hourly non-agricultural income in 2003 or 1985. However, there is some evidence suggesting that in 2003, men allocate more hours to these types of activities than women.

To examine the impact of women's participation in off-farm activities on children's welfare, we use anthropometric measures as a measure of preschooler well-being. Outliers with z-scores above or below what is biologically feasible were not included.⁶⁷ Some of the descriptive statistics on four main anthropometric measurements (z-scores) of children who are five years old or younger, calculated using the World Health Organization (WHO) growth charts and methodology (WHO, 2007; WHO, 2008),⁶⁸ show some evidence suggesting more favourable outcomes for girls in 1985 where girls have significantly higher z-scores than boys. These differences were particularly strong for the children who were less than two years old in 1985. However, for the 2003 sample, we cannot reject the null hypothesis that girls and boys have on average the same z-scores, since none of the t-tests of difference in means between boys and girls is significant. This preliminary assessment of means between girls and boys confirms the low levels of gender inequality in anthropometric measures in 2003.

67 Children with weight for height or a body mass index below -5 or above 5; children with weight for age below -6 and above 5; children with height for age below -6 or above 6.

68 The z-scores were calculated using the STATA programme: WHO Child Growth Standards, STATA igrowup package and macros.

In general, four conclusions can be drawn from this preliminary analysis. First, women's and men's participation in paid agricultural activities was reduced drastically from 1985 to 2003. Second, there has been a slight decrease in the percentage of women who participate in non-agricultural activities, which is mainly caused by a decline in the percentage of women who allocate their labour to non-agricultural businesses. Third, there has been an increase in the percentage of individuals in non-agricultural wage activities; however, the percentage increase in women's participation is rather small compared with men's. Fourth, there do not seem to be any significant differences in the annual or hourly earnings from non-agricultural waged activities between men and women.

4. The econometric approach

Mothers' participation in off-farm work can affect children's well-being through two opposing pathways: the time versus the income effect. If the first effect is stronger, then we should see a negative and significant effect of women's participation in paid non-agricultural activities on child welfare. On the other hand, if the income effect dominates, it is expected that women's participation in paid activities would increase the amount of financial resources available for the household members and particularly benefit children. However, there are two main issues that need to be considered when estimating the effect of women's participation in paid non-agricultural activities on children's well-being. First, mothers' participation in the labour market might be endogenous as well as correlated with the outcome under consideration. Women with healthier children might be more inclined to join the labour force, while women with ill children might be obliged to stay home providing care to those children. Women may also be pushed to work in paid activities if the household's expenditures are higher for any particular reason, including medical expenses for sick children. Second, some unobservable characteristics might influence both labour participation and children's health. If this is the case, then estimating a regular ordinary least squares (OLS) regression with women's participation as an independent variable might generate biased estimates. Hence, to assess the relationship between women's participation in paid non-agricultural activities and children's well-being, we use an Instrumental Variable approach similar to Angrist (2000), where the first stage will estimate the determinants of women's participation in non-agricultural activities by using a Linear Probability Model (LPM) and the second stage will estimate the effect of women's participation in paid activities on children's well-being.

Instruments are variables that affect women's participation in non-agricultural activities that do not have a direct effect on child welfare outcomes. The instruments used to identify women's participation in non-agricultural activities are the amount of land owned in hectares, the percentage of women working in non-agricultural wage activities in the community and the distance to the closest "*poblacion*" or community centre. We use land owned as an instrument because having access to large amounts of land might encourage women to engage in agricultural activities, and therefore may increase the probability of their participating in unpaid agricultural activities. Additionally, this variable is exogenous to children's health outcomes because once the amount of land *cultivated* by the household is controlled for, the amount of land owned should not have a direct effect on children's anthropometric scores other than by affecting the probability of their mothers' participation in paid activities. The percentage of women working in the neighbourhood is a proxy for social norms. A higher percentage of women working in non-agricultural wage activities suggests that it is socially acceptable for women to participate

in these types of activities, and may increase the willingness of women to work outside the home. At the same time, a greater percentage of women working in non-agricultural wage activities influences the demand for women's labour because employers might feel more comfortable when hiring women since it is socially acceptable for them to employ them. The percentage of women working in the community may also be capturing the "horizontal transmission" of bargaining power (Agarwal, 1997). Finally, if the household is located close to the centre of the community, where the economic activity is high, women might have more opportunities to be employed outside agriculture.

Once the first stage is estimated using an LPM, the predicted values are incorporated in the second stage that analyses the relationship between women's participation and children's well-being. Equation 1 captures this relationship:

$$W_{ji} = \gamma + \delta L_{wi} + \theta_1 \sum X_{ji} + \theta_2 \sum HH_{ji} + \theta_3 \sum Y_{ji} + \theta_4 \sum M_{ji} + \theta_5 \sum G_{ji} + \varepsilon_2 \quad (6)$$

Where,

W_{ji} is a vector of anthropometric measures used to proxy for children's well-being (z-scores): weight for height (WHZ), body mass index (BMI), weight for age (WAZ) and height for age (HAZ);

γ is a constant term;

W_{wi} is the probability that the mother i is participating in paid non-agricultural activities (an endogenous regressor);

X_{ji} is a vector of the child's specific characteristics (age, gender, whether the child is the youngest or the oldest);

M_i is a vector of individual specific characteristics of the mother (age, education, weight, height);

HH_i is a vector of household demographic characteristics (household size, percentage of children between 0-5 years old; percentage of children between 6-15 years; percentage of adults between 16-55 years old; and percentage of adults older than 55);

G_i is a vector of dummy variables for each municipality;

Y_i is a vector of economic and housing characteristics of the household (total land cultivated, durable assets, farming assets,⁶⁹ having cement floor and having access to toilet);

ε_2 is the error term; and

$\theta_1, \theta_2, \theta_3, \theta_4, \theta_5$ are the coefficients to be estimated.

The effect of women's participation in paid non-agricultural activities is captured by the θ_1 coefficient. Specifically, the income hypothesis would be corroborated if θ_1 is positive and significant. Then, we could argue that women's participation in paid non-agricultural activities has a positive effect on children's well-being because of its positive effect on income. On the other hand, if θ_1 is negative and significant, we would corroborate the time restriction hypothesis where it is presumed that children whose mothers work in these types of activities have lower z-scores because the mothers' unavailability of time restricts them from performing housework activities such as child care.

69 The measures for access to durable and farming assets are calculated by using factor analysis.

5. Results: assessing children's well-being

Since we are estimating these equations separately for each time period (1984-85 and 2003-04), some variations need to be made to assure the exogeneity of the instruments as well as to control for differences in social and economic contexts in each time period. For the parent sample (1985), our instruments are distance to the “*poblacion*” and the percentage of women working in non-agricultural wage activities in the community. When the amount of land owned in round 1 was included, the variable was not significant and reduced the joint significance of the instruments. Therefore, we did not include it as an instrument for this sample of households. For the 2003 sample, which is made up of households formed by children of those parents interviewed in 1985, we included the amount of land purchased before marriage or inherited by women, and the percentage of women working in off-farm wage activities in the neighbourhood as instruments. Since the surveys conducted in 2003 for split households and 2004 for migrant households were collected in only one round, it was not possible to use land owned by the household as an instrument during this period, as this might be endogenous to women's participation. However, the amount of land purchased before marriage or inherited from their parents is exogenous not only to participation in non-agricultural paid activities but also to marriage dynamics. Land inherited by women may also capture an exogenous source of wealth that can increase their bargaining power within the household. On the other hand, the distance to the nearest “*poblacion*” was not included because it might be endogenous to women's participation in paid non-agricultural activities. As mentioned, the economic and social circumstances in 2003 are completely different from those in 1985. Many of the households surveyed migrated to nearby urban communities, suggesting that the intention to look for better opportunities including labour prospects might be one of the primary reasons for migrating. This was not the case for the sample surveyed in 1985, when both land and labour markets were thinner and location was almost predetermined. The instruments used pass the tests of relevance, validity and over-identification.

The first stage estimation for the sample of 1985 respondents using LPM demonstrates that the percentage of women participating in agricultural wage activities in the community increases the probability of the mother being involved in paid non-agricultural activities, supporting our hypothesis that in communities where it is socially acceptable for women to work or where there is a local demand for female labour, women are more likely to participate in paid non-agricultural activities. On the other hand, distance to the centre of the community or “*poblacion*” decreases the probability that the mother participates in paid non-agricultural activities. These results confirm that women who are located closer to the centre of the community have more opportunities to obtain a job in this sector, probably because the supply of this type of jobs is higher. Also, since most of the non-agricultural jobs are located in the “*poblacion*”, mothers who live closer face lower transaction costs when traveling to their jobs. Hence, it becomes more attractive for them to supply their labour in paid activities. For the 2003 sample of adult children of the 1985 respondents, we also find that the percentage of women working in the neighbourhood positively influences women's participation in paid non-agricultural activities. In addition, land that is either purchased before marriage or inherited also increases the probability of their participation in paid non-agricultural activities. The impact of land could occur through several pathways. Exogenously acquired land could improve women's bargaining power within the household, making them more likely to allocate their labour in paid non-agricultural activities. On the other hand, women with larger landholdings can

decide to hire workers to cultivate their land, rent their land to others or give it to their husband for cultivation while they allocate their labour to the non-agricultural labour market. Other variables such as mother's education and mother's age have a positive effect on women's participation in paid non-agricultural activities.⁷⁰

The second stage estimations examine the impact of mothers' participation in non-agricultural employment on those daughters and sons in households with both parents present. These results are presented in Table III-10 for the 1985 sample and Table III-11 for the 2003 sample (see Annex). In 1985, the results indicate that mothers' participation in paid non-agricultural activities does not affect children's well-being. None of the coefficients that capture women's participation in non-agricultural activities are significant for any of the z-scores used as dependent variables. The absence of statistical significance of the coefficient of mother's participation might be due to the offsetting impacts of the time and income effects. However, the results presented in Table III-11 show that for the younger generation, mother's participation in non-agricultural activities has a positive significant effect on weight for height and body mass index, suggesting an increase of about 1.4 and 1.5 points, respectively. However, mothers' participation in non-agricultural activities does not appear to affect height-for-age, which is an indicator of long-term nutritional status, nor weight-for-age, which captures both short-term and long-term effects. These results suggest that women's participation in paid non-agricultural activities has a positive influence on short-term nutritional status, but may have an insignificant impact over the long term. Nevertheless, these results indicate that mothers' participation in non-farm work has become an important and positive influence on children's well-being in recent years. This is interesting since it corroborates the importance of women's work on children's welfare. Overall, these findings allow us to reject the hypothesis that, in this specific context, women's participation in the labour force has a negative effect on children's well-being.

70 Due to space limitations, the significance of other explanatory variables is not discussed here. First-stage estimates are available from the authors upon request.

6. Conclusions

This paper examined the impact of women's participation in paid labour activities on children's well-being. The results provide evidence rejecting the hypothesis that women's paid employment has a negative impact on child nutritional status. For the earlier sample, women's participation in off-farm activities did not affect children's anthropometric outcomes, while for the later sample, the statistical evidence suggests that women's participation in off-farm paid activities benefits their children. We also provide evidence that intergenerationally transmitted wealth affects children's welfare. Land purchased before marriage or inherited by women has a positive significant effect on women's participation in off-farm paid activities. Grandparents can therefore affect grandchildren's health outcomes by bequeathing land to their daughters. The ability of women to inherit land in the Philippines demonstrates the importance of an underlying social and legal framework that allows women to inherit land. Our results also provide support for the hypothesis that social norms, proxied by the percentage of women working in off-farm wage activities in the community, influence the well-being of children by increasing the probability of women's participation in off-farm activities. These two results confirm the importance of vertical transmission of bargaining power from parents to daughters as well as the horizontal transmission of social norms from other women in the community to mothers (Agarwal, 1997).

Women's participation in off-farm paid activities can be considered as an important pathway out of poverty in rural areas, not only because of their direct contribution to family incomes, but also because of the positive impact on child nutrition. Previous studies have demonstrated that health and nutrition in childhood affect educational attainment and economic productivity in adulthood. Women's participation in paid off-farm activities emerges as an important tool that can be used to enhance children's present and future well-being through improved nutrition. Policies that reduce barriers to women's participation in the labour force, whether through increasing the acceptability of women working outside the home or providing affordable quality child care, can help women take advantage of opportunities to both earn incomes and invest in the human capital of the next generation.

Annex

TABLE III-10

Assessing children's well-being (1985)

	(1)	(2)	(3)	(4)
	Weight for Age	Height for Age	Body Mass Index	Weight for Height
Endogenous regressor				
Mother's participation in non-ag. activities	0.160 (0.718)	0.055 (0.923)	0.001 (0.999)	-0.101 (0.847)
Mother's characteristics				
Mother's education	0.015 (0.471)	0.014 (0.562)	0.015 (0.476)	0.023 (0.296)
Mother's age	0.015 (0.098)*	0.024 (0.016)**	0.001 (0.943)	0.003 (0.790)
Child's characteristics				
Male	-0.132 (0.098)*	-0.180 (0.051)*	-0.053 (0.574)	-0.165 (0.073)*
Age	-0.613 (0.000)***	-1.147 (0.000)***	0.211 (0.127)	-0.103 (0.481)
Age Squared	0.093 (0.000)***	0.185 (0.000)***	-0.042 (0.103)	0.020 (0.454)
Eldest child (1 if eldest child)	-0.128 (0.342)	-0.003 (0.985)	-0.139 (0.382)	-0.177 (0.258)
Youngest child (1 if youngest child)	-0.207 (0.079)*	-0.449 (0.002)***	0.025 (0.842)	-0.057 (0.643)
Demographic characteristics of the household				
Household size	-0.082 (0.001)***	-0.103 (0.001)***	-0.019 (0.491)	-0.023 (0.416)
% children 0-5	-0.513 (0.340)	-1.212 (0.051)*	0.307 (0.628)	-0.142 (0.831)
% children 6-15	-0.185 (0.666)	-0.177 (0.737)	0.053 (0.914)	-0.145 (0.772)
% elderly (>55)	-0.452 (0.655)	-0.914 (0.341)	0.246 (0.825)	0.047 (0.967)
Economic characteristics of the household				
Toilet (1 if having a toilet)	-0.109 (0.344)	-0.129 (0.348)	0.025 (0.853)	0.001 (0.996)
Cement (1 if having cement floor)	0.045 (0.777)	-0.111 (0.557)	0.177 (0.324)	0.124 (0.512)
Farming assets	0.084 (0.118)	0.100 (0.152)	0.039 (0.554)	0.042 (0.518)
Durable assets	-0.089 (0.269)	0.093 (0.477)	-0.157 (0.091)*	-0.124 (0.192)
Land cultivated (Log/hecs)	0.000 (0.983)	0.035 (0.037)**	-0.032 (0.052)*	-0.037 (0.040)**

Parents' anthropometric measurements				
Mother's weight	0.042 (0.000)***		0.028 (0.000)***	0.033 (0.000)***
Father's weight	0.032 (0.000)***		0.027 (0.005)***	0.029 (0.003)***
Mother's height		0.057 (0.000)***	0.004 (0.669)	0.009 (0.384)
Father's height		0.050 (0.000)***	-0.039 (0.000)***	-0.034 (0.001)***
Community fixed effects	Yes	Yes	Yes	Yes
Constant	-3.649 (0.000)***	-16.442 (0.000)***	2.381 (0.192)	1.014 (0.628)
F-statistic of instruments' joint significance	11.89	11.41	11.83	11.83
Anderson Test (Identification / Relevance)	26.16	24.48	26.15	26.15
Hansen J Test (chi-2)	0.002	0.3	0.27	0.18
Observations	616	618	616	616

Robust p values in parentheses; Community Fixed Effects included; *significant at 10%; ** significant at 5%; *** significant at 1%
Source: Authors' estimations

TABLE III-11

Assessing children's well-being (2003)

	(1) Height for Age	(2) Weight for Age	(3) Body Mass Index	(4) Weight for Height
Endogenous regressor				
Mother's participation in non-ag. activities	-1.169 (0.127)	0.193 (0.749)	1.547 (0.040)**	1.384 (0.055)*
Mother's characteristics				
Mother's education	-0.002 (0.952)	-0.007 (0.774)	-0.018 (0.538)	-0.013 (0.657)
Mother's age	0.033 (0.092)*	0.001 (0.940)	-0.028 (0.111)	-0.021 (0.234)
Child's characteristics				
Male	-0.028 (0.840)	-0.036 (0.733)	0.010 (0.944)	-0.038 (0.781)
Age	-0.394 (0.010)**	-0.206 (0.070)*	0.077 (0.580)	-0.100 (0.475)
Age squared	0.038 (0.216)	0.002 (0.931)	-0.035 (0.208)	-0.005 (0.845)
Youngest child (1 if youngest child)	-0.198 (0.388)	-0.031 (0.845)	0.064 (0.756)	0.071 (0.718)
Eldest child (1 if eldest child)	-0.014 (0.949)	0.121 (0.460)	0.100 (0.653)	0.123 (0.577)

Demographic characteristics of the household				
Household size	-0.034 (0.547)	-0.031 (0.495)	-0.027 (0.639)	-0.024 (0.687)
% children 0-5	-2.340 (0.022)**	0.043 (0.961)	2.095 (0.083)*	1.995 (0.093)*
% children 6-15	-1.753 (0.046)**	-0.031 (0.968)	1.488 (0.156)	1.230 (0.239)
% elderly (>55)	-1.296 (0.347)	0.672 (0.653)	2.293 (0.302)	2.013 (0.336)
Economic characteristics of the household				
Toilet (1 if having a toilet)	0.294 (0.158)	0.121 (0.482)	-0.078 (0.720)	0.005 (0.982)
Cement (1 if having cement floor)	-0.104 (0.542)	-0.230 (0.064)*	-0.200 (0.209)	-0.203 (0.199)
Farming assets	-0.026 (0.822)	-0.177 (0.032)**	-0.249 (0.032)**	-0.244 (0.029)**
Durable assets	0.317 (0.005)***	0.078 (0.327)	-0.130 (0.180)	-0.112 (0.233)
Migrant households	1.321 (0.000)***	0.670 (0.000)***	-0.243 (0.193)	-0.093 (0.614)
Land cultivated (Log/hecs)	0.021 (0.325)	0.044 (0.002)***	0.043 (0.024)**	0.048 (0.012)**
Parents' anthropometric measurements				
Mother's height	0.039 (0.001)***		-0.017 (0.086)*	-0.013 (0.176)
Father's height	0.007 (0.251)		-0.002 (0.742)	-0.001 (0.895)
Mother's weight		0.026 (0.000)***	0.027 (0.002)***	0.027 (0.001)***
Father's weight		0.017 (0.012)**	0.012 (0.069)*	0.014 (0.033)**
Constant	-6.914 (0.002)***	-2.626 (0.003)***	0.647 (0.748)	-0.492 (0.805)
F-statistic of instruments' joint significance	12.25	9.51	12.25	12.25
Under-identification Test (Kleibergen-Paap)	25.7	21.45	25.34	25.34
Hansen J Test (chi-2)	0.66	1.02	0.1	0.04

Robust p values in parentheses; Community Fixed Effects included; *significant at 10%; ** significant at 5%; *** significant at 1%

Source: Authors' estimations

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