

The Paddy Chain

Building Constructive Alternatives

Editors

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DEDICATION

In late 2005, Hivos lost a dear friend. **Dr. Alexander Daniel** was the founding member of the Institute of Integrated Rural Development (IIRD), a Hivos partner organisation.

Dr. Daniel spent the best years of his life working tirelessly for the resource poor farmers of the Marathwada region in Maharashtra. His quest for alternatives to the more conventional forms agriculture are legendary. He was an active and enthusiastic member of the Core Committee for the workshop on 'Paddy Chain: Building Constructive Alternatives'.

His deep commitment to the cause, an urgent sense of purpose and his genial demeanor had provided him the great ability to draw diverse people from the voluntary sector and Members of Parliament to rally around the common cause that was so close to his heart-i.e. to look at agriculture from the perspective of a small and marginal farmer.

The attention that he wished to draw to these alternatives has inspired many and will undoubtedly be furthered by IIRD and many others. Dr. Daniel was engaged in developing the 'Framework for Alternative Standards and Certification' for the Government of India, literally till the very last moments of his life!

This report is sincerely dedicated by the team of Hivos and the Editors to Dr. Daniel.

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TECHNICAL REPORT SERIES

This Technical Report Series is part of the Hivos-India Regional Office's effort to participate actively in the debate and dialogue in India on issues of human development and emancipatory interests. This series consists of monographs, working papers and Hivos conference proceedings. The publications reflect policy concerns of Hivos regarding development issues in India and address the problems faced by the marginalized in developing countries, such as in the areas of governance, environment, gender, sustainable production, culture, the politics of development, economic activities, human rights and information and communication technology.

Series Editor: Shobha Ragburam

FOREWORD

K.S. Krishnaswamy

It has long been evident that poverty alleviation in India depends vitally on generating employment at a faster rate than output, which also needs to be raised to higher levels. Equally clearly employment generation is more urgent in the rural sector, which contains a majority of the poor. However, both the plan approach of earlier years and the reforms policy of recent times have focused largely on industrial and infra-structure development, unrelated to agriculture. While this has undoubtedly raised the growth rate of GDP, and may have reduced the proportion of the poor, there are even now upwards of 250 million who are abjectly poor, mostly, in rural areas. Notwithstanding rozgar yojanas of various kinds public distribution systems, support prices and so forth, much of rural labour suffers from low incomes, malnutrition, illiteracy, endemic diseases and so forth, finding solace only in their karma!

What explains this signal failure, in a country which the rest of the world sees as a global giant in the making? As always and everywhere, there is no single or simple explanation. But this much is certain: in our conditions, any development strategy which does not provide specifically for a significant advance in agriculture and rural industries is more likely to worsen rather than improve the poverty situation. Further, increased employment in these sectors has also to provide for a sizeable rise in productivity; this will require surplus labour on land to be shifted, mainly to non-farm activities within the countryside. This is a formidable proposition, requiring additional resource use as new technologies which are labour-using;

This is not however, merely a matter of re-allocation of productive resources or of technological innovations in agriculture and rural industries. Essential as they are for increased production, their benefits easily by-pass the poor if purposeful changes in political and social institutions, system of economic organization and ownership patterns do not occur. There have indubitably been efforts to modify all these since Independence; but these have been marginal and the rural social structure continues to be dominated by the upper castes. They have continued to own land and other capital resource, control trade and transport, run political parties and dominate society as they have always done. Panchayat institutions, cooperative credit and marketing societies, water resources, bureaucratic access and contracts, educational facilities etc., continue to be monopolized by the upper castes and property owners. Unless these environmental conditions for the poor are radically altered, output increases could exacerbate rather than reduce economic and social inequalities in rural areas.

All this is, indeed, common knowledge and the marvel is that everything aiming at remedying this situation is distorted and rendered ineffective by the dominant political and economic

elements in rural society. Neither poverty nor the attendant evils of malnourishment, illiteracy, gender discrimination and so forth can be effectively resolved without active people participation in governance and a transformation of social mores and attitudes. Local governments in the shape of panchayat institutions are now a constitutional requirement. But without adequate authority and resources, panchayats have become a travesty, reduced to mere agents of State government. They have had no impact on rural institutions or the livelihood patterns of the populace. Similarly, despite grand announcements about increased allocation to education, public health and other social amenities, the ground situation all over the country continues to be deplorable. Increases in GDP have tended to widen wealth and income inequalities in both rural and urban areas; and the composition of domestic production is tilted solidly towards meeting the needs of the rich and of foreign markets. A consequence of all this is perpetuation of all the traditional inequalities and deprivations especially in rural areas. What is singularly distressing is that with increased mobility of people and ideas, there is no lack of knowledge which can be utilized with great benefit to the common people – not merely in terms of raising their productivity and income levels but in making their lives more livable and meaningful.

This comes out impressively in the deliberations of the paddy chain workshop hosted by CSA, CWS and Hivos in July 2005 in Hyderabad. Though it was concerned with links in the chain of rice from the primary producer to the final consumer, the “constructive alternatives” which came up during the discussion are valid for other crops also. Importantly, the workshop enabled people with different persuasions and experiences to evolve a range of operational possibilities which seem *prima facie* beneficial to all concerned. As Prof. Padmini Swaminathan had said so aptly in her introduction below, the deliberations provide both a comprehensive critique of current economic policies and the “viability of alternative structures and ways-of-doing” with advantage to farmers as well for the country’s food security, rural environment, water conservation and so forth. Pursuing these alternatives will not be easy when academics and policy-makers alike are obsessed with globalization and adoptions of alien techniques, regardless of their impact on employment and human welfare. Besides the expertise and experiences which the participants brought to the task of enhancing the capability of all types of farmers, it was their concern to ensure that the benefits accrued in a significant measure to the rural community and, in a larger sense, to the health and progress of the nation as a whole which was impressive. One fondly hopes these conclusions of the report will have a multiplier effect on all of agriculture and related activities quickly and in a sustainable fashion.

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PREFACE

THE PADDY CHAIN: BUILDING CONSTRUCTIVE ALTERNATIVES

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Willy Douma, Shobha Raghuram

Introduction

Many of Hivos' partners are working in the area of sustainable agriculture, organic farming towards the building of long-term food securities within communities, and environmental justice. The wider environment of social injustice where issues of rural livelihoods and food security has been a source of growing concern also finds mention. It is a great pleasure for us that so many members of the public have accepted our joint invitation to work with us on these issues and contribute to this volume. The Hivos Regional Office is committed to working with people living in poverty and building organizations of affected people themselves. The Centre for World Solidarity (CWS) and the Centre for Sustainable Agriculture (CSA) are two such organizations which have been consistently working on these issues. It is an irony of the times we live in that the very people who are growing food are the ones facing extreme pauperisation. Not all Hivos' partners are working along the paddy chain but many of them have a strong background in livelihoods, in countering poverty effects, in lobby and advocacy and in building organizations that protect the rights of small farming communities to grow cereals, and to market them at the local level. While the workshop served as a platform that would bring together a range of experienced and eminent people from organic farmers' organizations, the field of academia/research, practitioners, policy makers for an animated exchange on various issues, we at Hivos were keen on getting informed by the debate on whether interventions along the chain would be useful in terms of addressing the issues of food and livelihood security for the marginalized within the farming communities and also those outside it. The central focus of our work as a social development institute has been on supporting organizations committed to eradicating poverty and all its attendant forms of rights-based losses. Hivos partners are present in 30 countries totaling almost 800 civil society organizations composed of social movements, cooperatives, community based organizations, and membership organizations. We are part of Alliance 2015 which enjoys the membership of several European donors committed to poverty eradication.

I. Rice Chain in the Context of the Hivos Sustainable Economic Development Policy

The main purpose of the Sustainable Economic Development policy of Hivos is to improve the economic position of poor and marginalised people in a sustainable way. Two important goals are to -

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- Increase and improve access to resources
 - Improve the quality of production processes

Research Studies on Rice/Paddy initiated by Hivos in Indonesia, Sri Lanka, India and The Netherlands looked at several aspects related to ecological/environmental, economic, institutional, social/gender dimensions of rice production, trade and consumption. The sharing of findings from these studies was done in an International workshop held in Sri Lanka in March 2004, where participants from Malaysia, Thailand and Philippines also participated apart from the countries where the studies were carried out. From the sharing of experiences it emerged that organic agriculture is indeed a better option for the small producer as it reduces the cost of production, enriches the soil, is environmentally friendly (reduces costs on healthcare) and there are possibilities for higher income if linked with the growing demand for organic produce. However very few examples emerged which actually indicated the engagement with a greater part of the food/value chain. This perhaps indicates the complexities and the difficulties in the processes as one moves along the chain. Given the political, socio-cultural, economic and agro-ecological diversities of India, it was felt that a much deeper understanding of the processes that affect the lives and the livelihoods of the paddy producers needs to be acquired for any meaningful interventions to be designed.

One other result of the regional workshop stood out: the need for farmers and their organisations to improve their marketing skills, insights and alongside these improve management systems. Hivos found a Thai organisation with more advanced insights to provide training to Hivos partners.

II. Contextualising Interventions

Global Poverty and Hunger

Extreme poverty remains a daily reality for more than 1.3 billion people who subsist on less than \$1 a day. Hunger and malnutrition are almost equally pervasive. 800 million people have too little to eat, 2 billion are malnourished. Southern Asia has almost 53% of the world's children who are hungry and under weight. It is tragic to note that most of the world's hungry live in rural areas, depending on the consumption and sale of natural products for both their income and their food. Hunger tends to be concentrated among the landless and the poor farmers. South Asia is home to half the developing world's poor. In Asia with decreasing new land, scarcity of water and increase in local demands for rice and various cereals, the challenges are many. Food deficits represent humanity's deficit at coping with divides that are dehumanizing. **This report is being compiled at a time when hunger, food security, protracted crisis in the agrarian economy are all more than just realities which are apart from us. The tragedies of**

farmers ending their lives must be remembered as the background in which our development policies regarding state and private responsibilities are discussed. In this meeting a complex array of insights will hopefully trace the threads of connectivity in a world getting more and more fragmented. The technical is located in the human crisis for solving the problems of small producers just as the social is informed in the ecological debate on rice production. The entire chain from pre production to processing, storing, marketing, and consumption needs to be carefully understood in the local, national, and international contexts – highly differential as these are.

India and the Reform Policies

The central focus of planning in independent India was to ensure a society marked by self-reliance and political independence with social welfare and poverty eradication having the highest priority. However the fall outs of liberalization policies include further polarization and deep social fissures.

The opening up of the economy has not created opportunities for gainful employment growth. Several states are showing stark and dismal realities. Growing privatization has not necessarily proved the efficacy of the reforms. Fundamental changes in the production structure are reducing small producers to immiserisation. We need a long-term view that accommodates with sufficient investments for linkages with universities, R&D laboratories, technology improvements, increase in costs in budgetary bases for social programmes. The attendant problems of caste, class, deteriorating situation in the position of women (poor wages, occupational health hazards, effects of pesticide), the lack of land reforms and the presence of persistent poverty and unemployment determine the nature and quality of progress.

Many years ago at one of our meetings on the Structural Adjustment Policies (SAP) Dr. K.S. Krishnaswamy said - “In pursuing SAP we have lost sight of the costs of transitions in terms of agricultural unemployment and other sacrifices to be made by marginal and small farmers”. Do we need increased state presence in agriculture and in tackling environmental and agro-market problems and how can that be cast not in a further centralization mode but in a promotional and proactive role? Can market economy led growth promote employment security and demonstrate that growth and justice are not mutually exclusive? A severely deficient infrastructure, low levels of education and health, agrarian poverty, structural dualism, persistent technology lags in industry, weak home markets demand that we address the meeting of basic needs, and build systems which will guarantee effective and equitable resource management and distribution.

Global agreements and the pressure to alter crop choices and make changes in consumption patterns, TRIPS and the vulnerability of farmers becoming dependent on an uncertain market for the purchase of seeds are realities that concern many partners. The thrust of the “internalization” of the Indian production structure especially in agriculture may enhance the already unequal distribution of incomes and the presence of hunger among large sections of the population. What is the role of rural banks, and cooperative credit institutions? Let us not forget that OECD countries over the last 40 years or so are subsidizing their agribusiness with an average of US \$350 billion a year, leading to an overpowering global infrastructure in production, marketing, transport and finance. Prof. Utsa Patnaik’s paper reflects some of these hard structural issues that have contributed to the immiserisation of the rural small producers.

III. Background: Reworking Rice Supply Chain

Asia’s rice based livelihood systems are the contiguous and largest of all food producing systems of the world. Asian rice lands produce 92% and consume 90% of the world’s rice and provide food and livelihood base to slightly more than half of the total world population (little more than 3 billion). The total rice harvested area of 135 million hectares is mostly scattered among small and resource poor farmers and provides employment to a large number of rural landless. These rice lands also support more than 50% of the world’s hungry.

Rice is a preferred staple food for more than one half of the world’s population. Rice is rich in genetic diversity, with thousands of varieties grown throughout the world. In its natural unmilled state, rice comes in many different colours, including brown, red, purple and even black. These colourful rice varieties are often prized for their health properties. Unmilled rice has a higher nutrient content than milled or polished white rice.

The rice supply chain provides livelihood to millions of people across the developing world. (Rice is the staple food for 65% of the total population in India). The global changes in trade and technology development have profoundly changed the situation today. The small and marginal farmers at one end of the chain are not only economically disadvantaged but often politically powerless, and when their interests are pitted against those of more powerful actors at the other end, they often lose. Therefore, understanding the institutional and political economy underpinnings of the organizational structure of a particular commodity or a sector is crucial for designing a set of measures that enables the poor to take fuller advantage of greater access to markets.

Hundreds of millions of people spend more than half their incomes on rice to feed their families. At the same time, rice farming is a major source of employment, especially for the poor, and about four-fifths of the world’s rice production is grown by small-scale farmers in

low income, developing countries. All over the world, rural women have traditionally played, and continue to play, an important role in both rice production and rice post-harvest activities. In many areas, tasks related to rice planning, weeding, harvesting and processing are the domain of women.

Numerous actors take part in the value chain that links rice farmers to final consumers: farmers, local traders, millers, wholesalers, retailers, and exporters in addition to the state owned Food Corporation and Public Distribution System. Other participants include transporters, seed companies, agrochemical companies, agricultural equipment companies, irrigation companies, banks, inspection agencies, commerce and tax departments, agricultural departments, farm organizations, miller organizations, research organizations, extension organization, policymakers, and consumer organizations. The relations among different participants in a sector determine the means by which benefits are distributed within the chain and influence the way different actors try to improve their positions within the chain. From the constraints identified, it is possible to derive policy recommendations to raise the returns of poorer households within the sector.

III.1 Pre-Production

With the green revolution, the dependency of farmers on external inputs has increased. This dependency has increased the costs of cultivation and also created several ecological problems. The productivity oriented extension systems have encouraged excessive monoculture of the crop and varieties. India which once had 30,000 varieties of rice; today gets 75% of its rice production from just 10 varieties (Return to Good Earth, 1990). Availability of good quality seeds in sufficient quantities locally is a major requirement. Retaining farmers' control over the seed is a major challenge with new legislations coming in, favoring corporate control over the seed. Similarly the various GM rice varieties in the pipeline for approval bring in the issues of patents and monopoly control over the seed by the MNCs in addition to posing new hazards. The new GM varieties of rice biofortified with beta carotene, iron etc could add to the health problems rather solving them. In spite of the reports across the world on the GM contamination in rice, Indian government/research establishments are aggressively promoting the GM path. In addition the IPR implications of such research are much less understood.

Many of the successful models established by various organizations on local resource based, organic production systems are remaining as isolated cases. The present support systems in the form of subsidies, credit or insurance favor only external input (chemicals, hybrids etc) based production systems. Government subsidies ultimately reach fertilizer and pesticide industries and do not support farmers to effectively make use of their local resources. This calls for a

complete recasting of the way government and financial institutions supports the provision of inputs.

The national and state governments recently initiated few programs on the capacity building on organic farming. All these initiatives are welcome, but without a paradigm shift in the conceptual understanding replacing the chemical inputs with bio-inputs may not really solve the problems of small producers and sustainability. All these are aimed at promoting (large scale) certified organic production to fetch premium price in international markets.

III.2 Production

Rice is grown under a wide variety of conditions in India. Rice is the only cereal that can stand water submergence, and this helps to explain the long and diversified linkages between rice and water. For hundreds of years, natural selection pressures such as drought, submergence, flooding, and nutrient and biotic stresses led to a great diversity in rice ecosystems. Historically, rice cultivation has been a collective enterprise. The investment and shaping of the landscape that are needed for the ponding system (terraces) require collective organization within the community. Water management also relies on collective interest: crop and water calendars must be organized for large blocks of fields in order to manage water efficiently and organize such work as land preparation, transplantation and drying for harvesting. With construction of dams and after the Green Revolution, rice became predominantly a canal-irrigated crop. Traditional Tank systems were totally neglected. Gradually farmers even in rainfed areas started cultivating rice under tube well irrigation. This has led to exhaustion of the ground water and several cascading ecological and economic problems. An acre of rice production in ponding conditions requires about 6 million litres of water which translates to 5000 litres of water for each kilogram of rice production. This shows the burden on the scarce natural resources. Growing rice in ponding conditions also lead to problems like salinity, methane emission etc.

An innovative system of growing rice with less water was initiated in Madagascar named System of Rice Intensification (SRI). This system which is based on sound ecological and agronomic principles not only reduces water utilization by about 40% but reduces the seed quantity required to 2 kg/acre and increases the yields by at least 20%. The experiences from Andhra Pradesh, Tamil Nadu and Jharkand show the advantages of the system. SRI for the first time after green revolution has brought in several innovations from farmers into mainstream agriculture. SRI also clearly demonstrates the biological potential of soil to support the plant given suitable conditions. SRI is best suited for the organic production systems. While SRI is suitable for certain conditions, there are various other such successful initiatives which need to be understood and promoted.

Though paddy is a self pollinated crop and has wide variation, research scientists focused on developing hybrids - as a high-end technology by public sector research and to retain control over the seed by the private companies forcing the farmers to buy seed every year. This would increase the cost of seed at least by three times.

III.3 Post-Production

Most resource-poor farmers have very limited capacity for retaining their produce after the harvest until they get good prices. Prices are generally low immediately after the harvest and the access of the small producers to infrastructure like storage and processing facilities is quite limited. In addition, lack of transparency and lack of awareness regarding the procurement by the Govt. agencies/mill owners add to the woes of the farmers. Also there are several moves to withdraw the minimum support prices and market intervention operations.

Procured rice is distributed through the Public Distribution System in the country. Similarly this rice is also used in the Food for Work program and national food assurance programs. While all these are aimed at providing food to the poor, such initiatives lead to 'sanskritisation' of food habits which also lead to changes in cropping patterns. The millets were completely left out of the support structures, and the growers suffer due to lack of demand and effective markets. Some innovative ideas like Rice Credit Line, which advances food to labor in lean periods and gets in return their labor, have been tried in states like AP.

Growing awareness about the health hazards of the chemicals used in production processes has increased the demand for organic foods. Several organizations have stepped into the organic production systems to capture the premier (but now also increasingly those in Asia's bigger cities) western markets. But it has limitations for small scale producers like high price of certification, inaccessible distant markets and difficulties to meet the strict international standards for organic production in a local/Indian context etc. National organizations like APEDA (Agriculture Produce Export Development Agency) have programs to subsidize the certification but focus on international markets. Local markets are only starting to develop.

IV. Contextualizing the Rice Chain

Today, the major threat to rice is mainly in the form of monopolization and monoculture that corporations are seeking to establish through the instruments of genetic engineering and IPRs in agriculture. Thousands of varieties of rice which were till now freely available are fast becoming

the private property and intellectual property of a few big companies. Although 90% of rice and rice varieties were developed and produced by the Asians, the West and their companies own it now. For example, Switzerland hardly grows any rice; its leading agribusiness company, SYNGENTA, has already claimed ownership of rice. In other words, Syngenta now claims to have monopoly over the poor people's crop and diet - the rice. It has acquired patents over the entire rice genome map. The same company made an unsuccessful attempt to acquire control over the rich collection of Dr. Richaria in Madhya Pradesh which are in custody of Indira Gandhi Krishi Viswavidyalaya (IGKV).

Throughout Asia, the trend in public and private rice research is to promote new rice varieties that will bring greater control to industry yet more harm to farmers, our health and the environment. If technological tools to control the seed were not enough, corporations are now securing the legal tools. The WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) gives global corporations the 'right' to claim monopoly ownership over rice through patents and similar mechanisms. Companies have already started to claim intellectual property rights (IPR) on rice. IPRs on rice give companies immoral and unethical monopoly control and force farmers to pay for the use of genetic resources and knowledge that originated from them, as in the infamous case of the basmati rice patent. While this is unacceptable, governments across Asia are being pressured to recognise patents and plant breeders' rights so that Corporations can control the whole agricultural sector, starting with the seed. The loss of traditional knowledges owned by farmers is a story that needs to be reversed.

At this juncture the Public-Private partnerships raise several serious concerns. For example, the hybrid rice program of ICAR at Directorate of Rice Research is supported by the Mahyco Research Foundation. Similarly the National Rice Biotechnology Network is working in close partnership with the industry. The new National Biotechnology Development Strategy paves way to strengthen such partnerships some more, resulting in the ultimate loss to farmers. The latest steps of govt. of India like the World Bank assisted National Agriculture Innovation Project (NAIP) and US-Indo Knowledge Initiative could be the last straw on the camel's back.

Opening up of the Indian retail sector for the Foreign Direct Investments would change the way the food markets operate in the country. The entry of Giant Multinational Corporations will change the existing supply chain systems. Indeed, the food secure nation has once again opened up its borders for food imports. The cheap imports have seriously distorted the domestic price situation making the market process unremunerative for the farmers.

Amendments to the Marketing Acts and the new Food Act will allow industry to take complete over the production and marketing of the agriculture produce specially the food.

These technological and policy changes are completely ignoring the cultural links paddy has with the lives of the people and the knowledge traditionally with farmers of the region. The new initiatives are making food a commodity to be marketed. This also affects the food sovereignty. Today food security is seen only as the quantity of buffer stocks. Specially the changes in trade policies with the Agreement on Agriculture poses new challenges which require new perspectives to understand the issues and the changes to be made on the ground, and changes to be brought about at the macro-level.

In this context this report attempts to discuss the various dimensions of rice which are intricately connected to the livelihoods of rice growers and workers and their natural resources. There are also several successful interventions and alternative experiences which have tried to deal with one or the other aspects mentioned above. With a deeper understanding of the issues involved, the analysis would provide a way forward for planning meaningful interventions in our efforts to Save Rice, Save Life.

V. Our Contributors

The workshop, The Paddy Chain: Building Constructive Alternatives (July 6th-7th, 2005, Hyderabad) that was hosted by CWS/CSA included farmers' groups/NGO representatives, various service providers, certifying agencies, processors, research institution members, government bodies, academics, and donors. The contributions from them reflect the diversity of experience and approaches. The issues span sustainable agriculture, poverty, food and livelihood security, and rice and its larger relevance. The report is presented to the reader under different thematic heads so that the focus is retained through the report. These include: Paddy Production Systems – Emerging Issues; Policy and Public Support for Organic Paddy; Marketing, Processing and Value Addition of Rice; Standards, Certification and Internal Control Systems and Additional Papers. Each thematic section is introduced by a synthesis report of the contributions and the discussions that took place in the workshop. Contributors were requested to focus on the key achievements, the challenges and opportunities, highlight how interventions have improved the livelihood and food security of small paddy producers, describe the impact of interventions on Environmental Quality, and the impact of interventions on positions of women. We have tried as editors to capture the wealth of experiences available in different parts of the country and in different institutions.

We thank all our distinguished contributors not only for their writings but also for their participation in the consultation. Their presentations range from exploratory observations to assuming lobby and advocacy positions. We also take this opportunity to thank the core committee members Dr. Afsar Jafri and Dr. Vinod Bhatt, Navdanya; Dr. A.V. Balasubramanian, CIKS; Prof. Padmini Swaminathan, MIDS; Ms. S. Usha, Thanal; Dr. Ramanjaneyulu, CSA; Dr. Rukmini Rao, CWS; Dr. Alexander Daniel, IIRD; Mr. Jagadish Pradhan, SVA; Mr. Muralidharan, Hivos who helped Hivos and CSA to charter a consultative course on the various issues surrounding the paddy chain. Finally we thank Dr. K.S. Krishnaswamy, Prof. Padmini Swaminathan, and Prof. Utsa Patnaik for joining us during this extraordinary process. Their contributions to this volume speak for themselves. CWS took an active interest in hosting the consultation. We are grateful to Shri. M.V. Shastri and the CWS team for the support provided.

As editors our special thanks to Ms. Kavitha Kuruganti and Mr. K. Hanumantha Reddy who assisted us considerably with rapporteuring and with distilling the text from the conference proceedings. Last but not least, we express our acknowledgment of the support given to the editorial team by Ms. Hemalatha of Hivos. CSA and CWS may undertake translation of some of these texts to regional languages for the use of farmers' associations. CWS took an active interest in hosting the consultation.

Last, but not the least, we have included for readers the draft of the *Jai Kisan*; Revised National Policy for Farmers which is presently being debated. This is the revised version of the first draft submitted on April 13th, 2006. Many issues raised here in this report are echoed in this draft policy document.

Conclusion

All along the chain we may see the quest for growth with distributive justice, and a history where the tiller of the soil is not made to sacrifice all claims to the land and to what he grows. The rural reality demonstrates an absence of even minimal conditions for existence. **This report should hopefully reflect/suggest enduring solutions, not hopes, not temporary nets. Small farmers – fragmented, impoverished, migrating in search of survival – these are the realities our partners retain when they enter into the discussions.**

Should we be optimistic about the elasticity of adjustments or should we develop a policy for sustainable production which sustains the small producers, the women and children in communities which are fast disintegrating? The privatization argument is detrimental to the

commonality of natural resources, managed by people and structured by people for the common good. We look forward to an intense debate surrounding various aspects of the paddy chain, the needed policy advocacy and recommendations for the required public initiatives. This report is a step in that direction.

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INTRODUCTION

Padmini Swaminathan

The Paddy Chain Workshop is an eye-opener in several ways. Taking paddy as an illustrative case, given its signal importance in the lives of large numbers of people and countries, a ‘farm-to-fork’ method was adopted to understand the trajectory of its passage from production to consumption. The Workshop did not follow the classic supply-chain methodology wherein a particular chain with all *its* nodes is generally traced; rather the workshop brought together people and organizations, all engaged with paddy in their respective regions and organizations but emphasizing different nodes of, not necessarily, the same chain. This pioneering effort on the part of the organizers, enabled wide-ranging and in-depth deliberations *simultaneously* on a number of linked issues, thereby enabling participants to get a glimpse of the strengths and weaknesses of each node as well as the magnitude and nature of tasks that need to be undertaken if this symbol of food security and food safety is to be preserved and strengthened. The organization of the Workshop was also exemplary in the manner in which it provided the context and the environment to weave in macro economic and social concerns at every step of the chain. The deliberations of the workshop, in our opinion, provide a comprehensive critique, in particular of our economic policies; at the same time, the presence of participants and organizations that have successfully demonstrated the viability of alternative structures and ways-of-doing provided the much needed relief and hope that Indian agriculture can still be salvaged and that food insecurity can be overcome.

This Introduction is aimed at outlining the contours of the problem facing the farm sector, whatever be the crop cultivated. However, each crop poses its own unique set of problems and to that extent requires policies to be flexible to address such uniqueness. The Workshop deliberations capture in detail ground level realities at different levels: at the level of institutions and structures; at the level of practices of cultivation and systems of marketing; at the density or otherwise of interventions [internal and external], and at the emerging opportunities as well as threats that opening up of the economy to global forces pose.

Taking the *agricultural* sector in general, a common but disquieting refrain heard among almost all economists as well as policy makers is that, emphasis on production has enabled the economy to achieve near self-sufficiency in staple food grains, yet, regressive institutions and structures of oppression have allowed very little percolation of benefits to those lower down the caste hierarchy and particularly the landless among the rural population. One manifestation of this phenomenon from macro data is that workforce dependent on agriculture has not

declined in any remarkable way, nor has the incidence of rural poverty significantly reduced. Further, contribution of the farm sector to gross domestic product has reduced over time even while population dependent on agriculture continues to grow. More nuanced analysis of the sector reveal the following set of issues that have, in our opinion, tremendous implications for not just our future strategies but also go some way in explaining the apparently contradictory outcomes of some of our policies and interventions. An illustrative set of issues would include the following:

- [a] Self-sufficiency in food grain production has not imparted the necessary resilience to the sector to withstand heavy and sudden dislocations such as may be caused by, say, resorting to 'free' trade in food grains.
- [b] The overall annual growth rate of agriculture declined to 3.6 percent during the 1990s from 3.9 percent during the preceding decades and that of its allied sectors declined to 3.7 percent from 4.2 percent during the corresponding periods. The growth of food grain production, which had accelerated to 2.9 percent in the 1980s, decelerated to 1.8 percent during the 1990s. As several economists have pointed out, what is disquieting is that the annual growth rate of food grain production was lower than the historical growth rate and barely kept pace with the population growth rate. Ironically, even at this slow growth of food grain production, its supply outstripped its effective demand and the 1990s witnessed a rapid and further increase in the buffer stocks held by the government, whose disposal has become a cause for concern apart from increasing the cost of management.
- [c] The issue of whether or not the country should export/import food grain gets drastically diluted when viewed in conjunction with the fact that, notwithstanding the level of production of grains, food grain intake is still very low and has not shown much of an increase.
- [d] Macro-level data do not capture sufficiently the themes of regional disparities as well as the growing disparities between rain-fed and irrigated agriculture. Green revolution significantly increased remunerative wage employment in pockets of assured irrigated areas while employment opportunities nearly stagnated in the vast rain-fed semi-arid areas. In the latter areas, wages remain low, underemployment of workforce is rampant; these are also the areas which have seen significant migrations of men folk in search of jobs leaving women and children to take of the not so productive lands. Since national level data systems do not provide cross-tabulated data one can only hazard guesses such as, that the marginally higher incidence of women as cultivators in the 1991 Census could be based on data from such areas since the migration of men would have made women and children cultivate the unproductive lands in their possession and extract

whatever they could from these lands. The larger point being made here is that the collection of differentiated data and analysis of such data are crucial for appropriate policy purposes.

- [e] *Generalized* calls for increasing state investment in agricultural infrastructure are futile. Economists have cautioned against the mixing up of the goal of raising productivity with that of poverty alleviation. Raising productivity and poverty alleviation may require distinct and separate policy interventions, even if the general target audience is the loosely termed farmer community. In addition it is not enough to assert the importance of *public sector* over the private sector in terms of financial allocations. Serious attention needs to be given to improving performance and making every sector, public or private, accountable to the farming community.

While on the theme of public investment, what needs to be added is that, India's growth problem is not a temporary demand slump that can be tackled by additional government expenditure. *The problem is both structural and one that requires investments in complementary inputs.* The economy's ability to absorb investment has diminished due to reasons both political and economic. Simply pouring more money in to the sector will not make it work. For example, the political decisions to provide free electricity, water and such other inputs do not contend with the fact that the distribution of land and other resources are skewed. Hence, apart from the fact that the organizations of services by government are department-wise, the more important fact is that, in the operationalisation of these [free] services there is no space to weave in structural factors such as the existing pattern of land-distribution and therefore the implications that this skewed distribution may have for the intended beneficiaries of particular services.

- [f] The primary concern of the private sector is with technologies embedded in seeds, chemical equipment and other inputs that they produce and sell. This sector has shown no interest in investing in research for better techniques of soil and water management, rain-fed agriculture, cropping systems, environmental impact and long-term sustainability.

All of the above, in our view raises the crucial question, namely, what is the official role envisioned for the agricultural sector? Fifty odd years ago, when the country embarked on planned development, the agricultural sector was perceived as the engine that would drive the rest of the economy even while it formed a temporary parking lot for the poor. How does the scene compare in 2006? Going by the deliberations of the Paddy-Chain workshop and particularly the keynote address by Professor Utsa Patnaik, the agrarian sector is in the throes of a major crisis. There is no single reason for this state of affairs – a point that comes out forcefully from the Workshop papers. What the Workshop also underlines is that getting things right requires nothing short of a comprehensive understanding for meaningful intervention.

One way of working towards this comprehensive understanding is by tracing the trajectories of commodity chains such as paddy. What policy makers see as seemingly disparate issues to be

dealt by different departments [such as, for example, Public Distribution system and irrigation], become interwoven when viewed from a chain perspective? Thus for example, the discussions at the Workshop on what the indiscriminate promotion of paddy has done to water and its distribution, or, how the PDS system privileges paddy and wheat over other nutritious crops thereby impacting on cropping patterns, etc. – made it possible for the participants approaching the paddy chain from different angles to exercise caution when advocating policies based solely on their limited field of work. More important, the Workshop was signally successful in centrestaging two themes that, in our opinion, have not received the engagement that they deserve either by researchers or policy makers: one, the theme of organic production and the challenges it poses, and two, the almost complete dissociation of the primary producer [the farmer] from other nodes of the chain. Hitherto, the vulnerability of the primary producer is generally sought to be addressed by increasing support prices [on the assumption that the primary producer not only owns her/his product but also directly accesses the market], and/or by making inputs available at subsidized rates. The Workshop deliberations put paid to such facile arguments. On the contrary, the range of issues covered on these two themes in particular was not only breathtakingly large but clearly indicated that there exist no simple resolution to the complex nature of the issues at hand. At the same time, since most of the participants are also engaged in their own way in resolving some or several of the issues related to organic paddy production in particular and through this involvement in addressing larger issues such as IPRs, GE seeds, etc., the report can lay legitimate claim to the fact that its contributors are involved in building and furthering constructive alternatives even as the environment around them and with which they have to contend on a day-to-day basis is hostile, and geared more towards disempowering rather than empowering individuals, organizations and constructive alternatives.

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