

More marketing choices mean better livelihoods for poor paddy growers

RIU

Validated RNRRS Output.

In Bangladesh, poor paddy growers are benefiting from new credit schemes that give them access to better prices for their crops. In the past, it was difficult for small-scale paddy farmers to have a choice concerning when and where to sell. Markets controlled by local elites left these farmers trapped in a vicious circle of poverty, indebtedness and dependence on the wealthy and influential households in their communities. Better understanding of these problems made it possible to develop a series of institutional innovations that enhance crop marketing to the benefit of small-scale producers. These include inventory credit schemes, focused on the transaction costs that shape the structure of the paddy marketing system, and, in particular, the linkages between participants. This methodology is also applicable to many other marketable crops and livestock products.

Project Ref: **CPH19:**

Topic: **5. Rural Development Boosters: Improved Marketing, Processing & Storage**

Lead Organisation: **Natural Resources Institute (NRI), UK**

Source: **Crop Post Harvest Programme**

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Description

CPH19

Research into Use

NR International
Park House
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UK

Geographical regions included:

[Bangladesh](#), [Uganda](#),

Target Audiences for this content:

[Crop farmers](#), [Livestock farmers](#), [Fishers](#),

A. Description of the research output(s)

1. Working title of output or cluster of outputs.

In addition, you are free to suggest a shorter more imaginative working title/acronym of 20 words or less.

Rice Marketing in Bangladesh**Improving Paddy Markets for Small-Scale Producers in Bangladesh: An Analytical Framework**

2. Name of relevant RNRRS Programme(s) commissioning supporting research and also indicate other funding sources, if applicable.

Crop Post Harvest Programme

3. Provide relevant R numbers (and/or programme development/dissemination reference numbers covering supporting research) along with the institutional partners (with individual contact persons (if appropriate)) involved in the project activities. As with the question above, this is primarily to allow for the legacy of the RNRRS to be acknowledged during the RIUP activities.

R7496

The Institutional Partners were:

Natural Resources Institute - Mr Andrew Goodland, Mr Andrew Long; Dr. Barbara Adolph and Gideon Onumah (Lead contact: tel: 44 16343263, email: G.E.Onumah@gre.ac.uk;

Bangladesh Agricultural University (Mymensingh) - Dr W.M.H. Jaim;

Bangladesh Rice Research Institute (Gazipur) - Dr B.A.A. Mustafi, Dr M.D. Abdul Jabber and Ms. Rabeya Rowshan.

4. Describe the RNRRS output or cluster of outputs being proposed and when was it produced? (**max. 400 words**). This requires a clear and concise description of the output(s) and the problem the output(s) aimed to address. Please incorporate and highlight (in bold) key words that would/could be used to select your output when held in a database.

The main output of this project was a **methodology** to identify **marketing constraints** faced by small-scale paddy producers, as well as formulating institutional innovations which could help address these constraints. The conceptual framework for analysis included the use of **new institutional economics**, with its central concept of **transaction costs**, married with the **sustainable livelihoods framework**. The research, undertaken by economists and anthropologists, focused on ascertaining the level of transaction costs in paddy markets; how these costs shape the structure of the marketing system, and, in particular, the **linkages between participants**.

The methodology proved useful not only in enabling the analysis of a commodity sector but also in providing a framework for exploring problems faced by small-scale paddy producers in Bangladesh, leading to the exploration of **institutional innovations** to address constraints, reduce transaction costs and enhance crop marketing to the benefit of small-scale producers. One of the main recommendations to emerge from the analysis was the

development of **inventory credit schemes**. An inventory credit scheme would address a) inefficiencies in the Government Procurement Scheme, including its failure to ensure stable prices for small-scale farmers due to corruption, levies, small volumes and long distances to the centres and, b) the lack of investment and working capital which, forces small-scale farmers to sell paddy soon after harvest, at a time when paddy prices are at their lowest, to repay debts, mainly incurred for input purchasing.

5. What is the type of output(s) being described here?

Please tick one or more of the following options.

Product	Technology	Service	Process or Methodology	Policy	Other Please specify
			X	X	

6. What is the main commodity (ies) upon which the output(s) focussed? Could this output be applied to other commodities, if so, please comment

Rice

This methodology is also applicable for many other marketable **crops and livestock products**.

7. What production system(s) does/could the output(s) focus upon?

Please tick one or more of the following options. Leave blank if not applicable

Semi-Arid	High potential	Hillsides	Forest-Agriculture	Peri-urban	Land water	Tropical moist forest	Cross-cutting
X	X	X	X	X	X	X	X

8. What farming system(s) does the output(s) focus upon?

Please tick one or more of the following options (see Annex B for definitions).

Leave blank if not applicable

Smallholder rainfed humid	Irrigated	Wetland rice based	Smallholder rainfed highland	Smallholder rainfed dry/cold	Dualistic	Coastal artisanal fishing
X	X	X	X	X	X	X

9. How could value be added to the output or additional constraints faced by poor people addressed by clustering this output with research outputs from other sources (RNRRS and non RNRRS)? (**max. 300 words**).

Please specify what other outputs your output(s) could be clustered. At this point you should make reference to the circulated list of RNRRS outputs for which proformas are currently being prepared.

This project output can be clustered with a number of other RNRRS project outputs, including:

Crop Protection Programme

Linking demand with supply of agricultural information: R8429/R8281- (B. Pound, Natural resources Institute, UK);

Crop Post Harvest Programme

Participatory market chain analysis: R8182/R8418 – (A. Devaux CIP, Peru);

Farmer Access to Markets: R8275 – (A. Dorward, Imperial at Wye); R8274/R8498 (A. Agona, National Post harvest programme, Kawanda, Uganda);

Inventory Credit Schemes: R8113 (P. Kaumbutho, Kenya Network for Draught Animal Technology, Kenya); R6344/R7013/R7668 (G. Onumah, Natural Resources Institute, UK); R8114 (U. Kleih, Natural Resources Institute, UK)

Market Information Tools: R7151 – (N. Poole, Imperial College at Wye); R8250 (U. Kleih, Natural Resources Institute, (UK); R7494 (J. Orchard, Natural Resources Institute, (UK); R8422 L.T. Nsemwa & N. Lyimo, Uyole Agricultural Research Institute, Tanzania);

Natural Resources Systems Programme

Scaling up processes: (R7865, S. Gundel, Independent); (R8381, Huhu Hatibu, ASARECA, Kenya)

Validation

B. Validation of the research output(s)

10. How were the output(s) validated and who validated them?

Please provide brief description of method(s) used and consider application, replication, adaptation and/or adoption in the context of any partner organisation and user groups involved. In addressing the “who” component detail which group(s) did the validation e.g. end users, intermediary organisation, government department, aid organisation, private company etc... This section should also be used to detail, if applicable, to which social group, gender, income category the validation was applied and any increases in productivity observed during validation (max. 500 words).

The outputs were validated through a number of ways:

- a) The preparatory and field studies were undertaken by a team of specialists from both Bangladesh and UK, and applied the sustainable livelihoods approach together with aspects of new institutional economics theory.

b) The study was undertaken in three districts of Bangladesh, chosen to reflect diverse agro-ecological and sociological conditions - Bogra, Feni and Sunamganj. Bogra is a surplus producer with well-developed markets and infrastructure, Sunamganj is a moderate producer, with less developed markets and relatively poor infrastructure; and Feni, is politically unstable, a deficit paddy producing district with underdeveloped markets. The purpose of choosing such a mixture of districts was in order to accept or reject the following hypotheses which are assumed to affect markets, that:

- economic, political and social constraints prevent small-scale farmers from achieving better exchange rates for their paddy;
- inefficiencies in paddy markets result in lower producer prices;
- Government policies intended to support small-scale producers in marketing paddy fail in both design and implementation to support these farm households.

c) The sampling of districts, villages, markets, and households was done by district extension officers and local officials, with assistance from the specialist team. The samples were selected first through purposive selection followed by a random sampling of the required number from the first sample. A total of 120 small-scale farmers (40 from each district) and 110 traders and rice millers were selected. Interviews were conducted in a series of qualitative interview techniques including farmer questionnaires, focus groups and key informant interviews. Previously undertaken quantitative surveys provided supporting information to the mainly qualitative work carried out in this project.

d) Questions explored related to production, post-harvest and infrastructural constraints such as on-farm storage and losses, transport costs, consumption and marketing patterns, market interactions between participants, and government policies in the paddy and rice sector.

e) A final project workshop was held, where project outputs were discussed and recommendations were finalised to form the final technical report with participation from research organisations, NGOs, government departments and universities.

11. *Where and when have the output(s) been validated?*

Please indicate the places(s) and country(ies), any particular social group targeted and also indicate in which production system and farming system, using the options provided in questions 7 and 8 respectively, above (max 300 words).

This output was only validated in Bangladesh in the three districts mentioned above. There were two main surveys conducted with the same sample of paddy producers identified to interact with paddy and rice markets. The first survey used a questionnaire-based approach and was undertaken between March and April 2000. The questions in this first questionnaire were broad and exploratory. The second round of surveys were focused and aimed at further exploring some of the constraints and issues identified in the first survey. This survey was done in October and November 2000.

During this period, other surveys of traders and millers through key informant techniques were conducted. The study showed differing roles of traders in the marketing chain according to their size, circumstances and location.

The study also showed that paddy markets were different to hulled rice markets in that paddy rice was collected from a large number of producers while rice is distributed to a large number of consumers. Millers provided the pivotal point of the two products.

The interim and final reports generated significant interest from the Ministry of Agriculture, IFPRI Bangladesh, DFID Bangladesh and other researchers. The final report was circulated to relevant stakeholders including the ones listed above, and provided useful inputs to the PETRRA project.

Current Situation

C. Current situation

12. How and by whom are the outputs currently being used? Please give a brief description (max. 250 words).

The New Institutional Economics, with emphasis on the transaction costs approach, is being applied in analysing and understanding market constraints and in exploring institutional innovations that can improve market performance. This framework has widely been applied, for instance, by Imperial College London (Wye) in studies in Africa on domestic markets and export commodities. The Natural Resources Institute also applied the methodology in examining opportunities for improving the marketing of both exported and locally-traded commodities in Africa and in Bangladesh. For example, as a result of this project output (R7496) and its findings, the Natural Resources Institute, with the same team, carried a follow up study entitled “Improving Access to Good Quality Agri-Inputs” using the same methodological approaches. The results of this study are discussed in section D16. Other development research institutions have applied the framework in analysing commodity markets and recommending options which have been incorporated in market development programmes or to specific projects to develop new market institutions. These include IFPRI, and the Institute of Economics (University of Copenhagen).

13. Where are the outputs currently being used? As with Question 11 please indicate place(s) and countries where the outputs are being used (max. 250 words).

Further to the “Improving Access to Good Quality Agri-Inputs” work mentioned in C12, in 2002 the Natural Resources Institute used the same methodologies to analyse marketing and transaction costs (Transaction Cost Analysis) for six key strategic commodities for Uganda, financed under the Plan for the Modernisation of Agriculture of the Ministry of Finance, Planning and Economic Development. The recommendations contributed to the implementation of actions to overcome constraints to marketing and processing efficiency and to improve farm-gate prices for smallholders leading to the attaining of the Poverty Eradication Action Plan. Other similar work include those by: Imperial College London at Wye: Competition and Coordination in Liberalised African Cotton Market Systems, Poulton *et al.*, 2003; Poor country Agriculture: Analysis Prescription and Institutional Gaps, Kydd and Dorward, 2001; IFPRI – Market Institutions, Transaction costs, and Social Capital in the Ethiopian Grain Market, Gabre-Madhin, 2001.

14. What is the scale of current use? Indicating how quickly use was established and whether usage is still spreading

(max 250 words).

The cases cited in 12 and 13 indicate that the methodology has been widely used in market research circles.

15. In your experience what programmes, platforms, policy, institutional structures exist that have assisted with the promotion and/or adoption of the output(s) proposed here and in terms of capacity strengthening what do you see as the key facts of success? (max 350 words).

The work by NRI and Wye College has led to subsequent work in Uganda and Tanzania where inventory credit schemes were identified as innovations to address market constraints and were adopted in other programmes such as the ongoing CFC funded Warehouse Receipt System (WRS) Projects in East and Southern Africa and the EU funded WRS in Uganda. Failure to incorporate recommendations in other programmes and projects lead to these innovations becoming just academic exercises.

Environmental Impact

H. Environmental impact

24. What are the direct and indirect environmental benefits related to the output(s) and their outcome(s)? (max 300 words)

This could include direct benefits from the application of the technology or policy action with local governments or multinational agencies to create environmentally sound policies or programmes. Any supporting and appropriate evidence can be provided in the form of an annex.

Environmental aspects are not addressed by the project. For example, Adolph and Chancellor, 2006) state that “Few RNRRS rice projects had a primary focus on environmental sustainability”.

However, this methodology is a useful tool to help small and medium scale farmers to identify environmental damaging practices and able to address these practices. The project on “Improving Access to Good Quality Agri-Inputs” helped lead to the use of better quality inputs which are less harmful to the environment than those traditionally used.

25. Are there any adverse environmental impacts related to the output(s) and their outcome(s)? (max 100 words)

None

26. Do the outputs increase the capacity of poor people to cope with the effects of climate change, reduce the risks of natural disasters and increase their resilience? (max 200 words)

The outputs, if implemented could help to develop sustainable systems that enable producers to produce more efficiently and cope better with disasters. Policy makers should ensure that their interventions do not create

market distortions with long term implications which may lead producers failing to cope.

Annex

References

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