

Using livestock to improve the livelihoods of landless and refugee-affected livestock keepers in Bangladesh and Nepal

A. McLeod¹, M. Saadullah², M.L. Jayaswal³, J. Best¹, D. Barton¹, C. Rymer¹, B.N. Regmi⁴, T.R. Noor⁵

¹VEERU, School of Agriculture Policy and Development, The University of Reading, Earley Gate, P.P. Box 237, Reading RG6 6AR, UK. ²Dept. of Animal Science, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh, ³New ERA, P.O. Box 722, Kalapal, Kathmandu. ⁴Nepal Agroforestry Foundation, P.O. Box 9594, Kathmandu, Nepal. ⁵PRA Promoters Forum, Dhaka, Bangladesh

Background Bangladesh and Nepal are two of the poorest countries in the world. In Bangladesh it is estimated that 48 % of the population live in poverty (they consume less than 2122 Kcal/day) and 27 % in absolute poverty (consuming less than 1805 Kcal/day). However, the economy has experienced rapid growth in recent years (circa 5 % per annum over the past decade, World Bank, 1998) and there is increasing demand for livestock products. The pressure to intensify rice cultivation has led to a decline in the numbers of cattle (Barr, 1998) with adverse implications for human health and nutrition (NRSP Project R7600, 2000) and soil fertility. Landless agricultural workers are among the poorest people and have significantly lower incomes than those employed in non-agricultural business. Rural households headed by women have a higher probability of being poor than those headed by men, and divorcees and widows are particularly vulnerable. So, too are the chor-dwellers, people whose land is regularly inundated by floods. Ownership or access to land in rural areas is a key determinant of poverty. Urban households are generally better off than rural households and 93 % of the very poor live in rural areas. Given these determinants of poverty, projects which target landless households, and in particular female-headed households, should reduce underemployment and raise living standards (World Bank, 1998).

Nepal has an estimated 53.1 % of the population below the international poverty line (UNDP, 1999) and more than 80 % of its population living in rural areas and depend on agriculture for their livelihood (Bhandari *et al.*, 1986). The average size of cultivated landholding has been estimated at about 0.4 ha (Kiff *et al.*, 1999). This makes Nepal one of the most land-poor countries in the world (Khan, 1977). In 1983, there were 1053 persons/km² arable land in the hills of Nepal, compared with 823/km² in rural Bangladesh (UNICEF, 1983). Bhandari (1985) estimated that nearly 46 % of the people were landless or near-landless. The consequence of this landlessness is a high rate of malnutrition and infant mortality. Bhandari (1984) reported that 60 % of children in Nepal were suffering from protein-calorie malnutrition, and that 10 % suffered from third degree malnutrition. The situation has not improved with time. In 1999, the Human Development Index was only 0.463 for Nepal compared with 0.918 for United Kingdom and life expectancy at birth was only 57.8 years compared with 77.2 years for UK (UNDP, 1999).

Ruminant livestock, poultry (ducks and chickens) and rabbits have been increasingly viewed as a means of alleviating poverty in Bangladesh (Proshika, 1999) and are believed to improve the livelihoods of landless households (less than 0.2 ha). Hundreds of NGOs are involved with the promotion of micro-credit for small livestock enterprises. Although NGOs' monitoring and evaluation activities indicate that many of these programmes to promote livestock are successful and that loan repayments are good (90 %+), there has been little external assessment of their impact. Previous approaches to improve the livelihoods of the rural poor in Nepal have been unsuccessful (Hamal *et al.*, 1987). A land reform programme undertaken by His Majesty's Government of Nepal in the 1960s did not significantly change the distribution of land, or the size of landholdings. It also failed to increase the accessibility of credit to the landless and near-landless. The Integrated Rural Development Programmes of the 1970s often resulted in an overall decrease in agricultural productivity, and employment opportunities that were created were exploited by medium and large farmers at the expense of the landless (Hamal *et al.*, 1987). Money for agricultural research has also not reflected the needs of the very poor and landless (Adhikary, 1987). Keeping livestock is more labour intensive than grain farming, and offers job opportunities for the landless (Mellor, 1974). The landless may look after other people's livestock, and the calves and kids from these livestock are then shared between the tenant and the owner (Bhandari *et al.*, 1986).

In Jhapa and Morang districts of eastern Nepal, there are 98,000 Bhutanese refugees of Nepali origin who have been resident in camps over the last 13 years. It is estimated that 353,000 people in the surrounding communities are directly or indirectly affected by refugee presence (LWF, 1999). Some effects have been negative, including loss of employment to local labourers, decline of household income, loss of traditional practices from forest products and social disharmony, and the local poor and landless feeling that they were suffering from discrimination (New ERA, 1994). Infrastructure projects put in place for the affected communities in response to the report have helped to relieve the problem but not removed it. A visit by the authors in January 2001 found that the refugees' presence has created changes in livestock production. Some previous livestock keeping practices appear to have declined (e.g. grazing of goats in the forest by women, for fear of rape) while others have grown up (e.g. pig share-keeping by the landless for refugee families; and an increase in milk sales). The increase in pig numbers has raised the income earning potential for some landless people but at the same time reduced chicken keeping and may also have created a human health hazard. There has been no assessment of the balance of benefits and costs to the refugee affected communities, and very little livestock research or extension has been focussed on helping

them to cope with the changing situation.

Current research DFID's Livestock Production Programme Research Project R8109 is working in Bangladesh and Nepal. It has two main activities running in parallel over the next 12 to 18 months. The first task is to investigate the aspirations and constraints of different groups of landless and refugee-affected people, and the opportunities that livestock are providing and might provide to improve livelihoods. The second is to examine the design and impact of existing livestock projects for the landless, of which there will be a particularly large choice in Bangladesh, and to learn lessons from them. Finally, a small action research project in each country on a topic identified through the previous activities will be used to seed further research and development.

In preparation for the main project activities, a survey has been carried out of approximately 100 NGOs and other organizations working with the landless and refugee-affected, to discover:

- 1 their approach in working with these target groups
- 2 the projects they have recently implemented
- 3 initial impressions of successes and constraints

The project team will continue to work with a selection of these NGOs to review project design and impact.

A methodological review is in preparation as part of the design of the PLA and impact assessment studies. By reviewing literature and drawing on previous experience of the authors, it is examining

- 1 organizational culture of projects, the way in which this affects their design, implementation and evaluation, and implications for working with the rural poor
- 2 participatory approaches to research and development with vulnerable people
- 3 the use of qualitative and quantitative indicators, separately and in combination, to measure the impact of projects

The project is committed to working with three representative groups of the landless and refugee affected, in 3-4 locations, involving four livestock species. To the extent possible it will use a process approach, examining the results of each stage of research before planning the next stage, to allow for exploration of unexpected findings and development of methodology. Exchange visits between Bangladesh and Nepal are planned, to encourage regional sharing of experience.

One of the main challenges of a research project is to disseminate or "upscale" its findings. This will be especially important for the present project, so that we do not raise the expectations of our very vulnerable project groups and then abandon them. The project is trying to address this by:

- 1 making contact with NGOs (probably the main institutional target for the findings) at a very early stage, by approaching them for the survey
- 2 ensuring that those involved in the initial survey continue to have access to project outputs and updates on progress
- 3 to work with NGOs in evaluating the impact of previous projects that they have carried out
- 4 carrying out the action research component of the project in collaboration with, or at least with some involvement of, one of the NGOs that has been in contact with the project

Acknowledgement This publication is an output from a research project funded by the United Kingdom Department of International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID. RNR Research Project R8109, Livestock Production Programme.

References

- Adhikary, G. (1987) Institutional practices and the Nepalese poor. Rural Poverty Research Paper Series No. 7. Winrock International Institute for Agricultural Development, Kathmandu, Nepal.
- Bhandari, B. (1984) Socioeconomic characteristics and nutritional status of Nepalese children in Chitwan. MSc. Thesis, University of Wisconsin, Madison, USA.
- Bhandari, B. (1985) Landownership and social inequality in the rural Terai area of Nepal. PhD Thesis, University of Wisconsin, Madison, USA.
- Bhandari, B., Kunwar, N. and Dongol, B.B.S. (1986). Rural Poverty and the poor in Nepal: comparative case study of a hill and Terai village. Rural Poverty Research Paper Series No. 4. Winrock International Institute for Agricultural Development, Kathmandu, Nepal.
- Hamal, K.B., Bhattarai, R. and Niraula, B. (1987). Rural development policy and poverty in Nepal. Rural Poverty Research Paper Series No. 8. Winrock International Institute for Agricultural Development, Kathmandu, Nepal.
- Khan, A.R. (1977) Poverty and inequality in rural Bangladesh. *In: Poverty and landlessness in rural Asia*. ILO, Geneva.
- Kiff, E., Thorne, P.J., Pandit, B.H., Thomas, D. and Amatya, S.M. (1999) Livestock production systems and the development of fodder resources for the mid-hills of Nepal. NRI, Chatham Maritime, UK.
- LWF (1999) The Lutheran World Federation Department for World Service - Nepal Programme, Annual Report 1999,

Nepal.

Mellor, J. (1974) *The new economics of agricultural development*. Cornell University Press, Ithaca, New York.

New ERA (1994) *Mitigation of the impact of Bhutanese refugees on local communities*. Submitted to Lutheran World Service, Kupondole, Lalitpur, Nepal.

NRSP project R6700 *Feasibility of integrated crop management (ICM) in Bangladesh*. Interim report to NRSP. September 2000.

Proshika 1999 *Activity Report July 1998 - June 1999*. Dhaka.

UNDP (1999) *Human Development Report "Globalisation with a Human Face"* www.undp.org/hdro/

UNICEF (1983) *The small farm family*. UNICEF, Kathmandu, Nepal.

World Bank 1998 *From counting the poor to making the poor count. Poverty reduction and economic management network*. South Asia Region, The World Bank.