Farm women shoulder the burden

In developing Asian countries women are left by their husbands for part of the year and must take on farm managerial duties, reports Jenni Metcalfe

PARTNER COUNTRIES: Australia, Thailand and Vietnam PROJECT: PLIA/2000/039: Impact of migration and/or off-farm employment on roles of women and appropriate technologies in Asian and Australian mixed farming systems DESCRIPTION: The project will assess the effects of off-farm employment on agricultural productivity, farm efficiency, welfare and the changing roles of women at the household, farm and local levels CONTACT: Thelma Paris, t.paris@cgiar.org

"My husband comes home once a year … so aside from the traditional tasks I used to do, I now have to take over the jobs that my husband did, such as preparing the nursery for rice seedlings, irrigating the fields, broadcasting fertiliser and spraying pesticides. After going to the market and finishing household chores, I visit our fields every day."

This was how Mrs Lien describes her life since she started running the family's irrigated farm in South Vietnam. Her husband works in a private shoe factory in Ho Chi Minh City. This leaves Mrs Lien to raise the family as well as single-handedly oversee the small farm's rice-growing.

In the northern Philippines, another woman whose husband is a seasonal migrant says: "If my husband is away, I supervise the farm's crop operations. My husband leaves after the land preparation to work as a carpenter in another province for at least four months. Now I have to check when the crop is ready and start hiring labourers to harvest it. I find it difficult to hire labourers because there is competition during these peak months."

In north-east Thailand there are similar stories of women left behind to take on new managerial responsibilities.

"Although my husband's remittances from construction work are a big help to us, particularly for my children's education, I have to manage the labourers for rice production and for crop care of the rubber plantation," says one Thai wife. "I make all the decisions on farm and household matters. When in doubt, I consult my husband via telephone."

Women changing roles from unpaid family worker to farm manager is becoming increasingly common in developing Asian countries. However, their lack of access to the information and resources they need for new crop and water management technologies can have a negative impact on the productivity and sustainability of local agriculture, says Dr Thelma Paris, a social scientist with the International Rice Research Institute (IRRI).

"Agricultural technologies, practices, policies and systems are based on the conventional assumption that farmers in developing countries are full-time male farmers," Dr Paris says.

She says that while agricultural projects deal mostly with introducing, validating and evaluating technologies to reduce poverty and improve livelihoods in developing countries, there is a need to understand drivers of change: "We need to examine the factors that constrain or support the adoption and diffusion of technologies."

BRAD COLLIS

Dr Thelma Paris, a social scientist with the International Rice Research Institute (IRRI).

Dr Paris is leading an ACIAR project that is looking at social changes occurring in agriculture in Asia and Australia, and the changing role of women as a result of off-farm employment or migration.

The project is a collaboration between IRRI, Curtin University of Technology (Australia), Khon Kaen University (Thailand) and the Cuu Long Delta Rice Research Institute (Vietnam).

The team brings together a mix of social science skills, including gender specialisation, agricultural economics, sociology and extension.

Data and information collected from her surveys will be used to assess the effects of off-farm employment on agricultural productivity, farm efficiency, welfare and the changing roles of women at the household, farm and local levels.

"Economic pressures push members of farm households to seek off-farm work, leaving one partner to look after the farm," Dr Paris says. "This is also true of the dryland farming areas of Australia where the vast majority of farming families undertake off-farm work.

"The bottom line is that, while remittances are useful in helping families left behind, women must maintain productivity levels and deal with increased burdens and responsibilities.

"Our research should provide early warning of rapid changes that may be undermining the national and regional food security that we've worked so hard to achieve over the past several decades."

The results of the research so far show that the proportion of households with migrants (individuals away for more than three months who send their income back home) is higher in Thailand than in the Philippines and in Vietnam. A higher proportion of males migrate compared to females in Thailand and Vietnam, but the opposite is true in the Philippines, where most of the migration is international rather than domestic.

"My husband is away 20 to 30 consecutive days without communicating with me," says Mrs Tran Thi Dao, a 35-year-old mother of three from South Vietnam whose husband is a short-term migrant working as a labourer digging soil. "His earnings are spent on food (rice and meat), children's health care and school supplies."

Mrs Tran Thi Dao's husband became a migrant worker just one year after they married. However, her husband's off-farm income is not enough to

cover the farming costs – seed, fertiliser and pesticides – which are bought on credit with the hope that this can be paid back at harvesting time.

"When I have free time, I work as a hired labourer for additional income," Mrs Tran Thi Dao adds. "I feel so alone and lonely without my husband. I worry that no one will take care of my children if I get sick." She is also concerned that she knows little about rice diseases and has to depend on local pesticide dealers for advice.

Shouldering responsibility for the farm is also a burden for Mrs Lien. "I find it quite difficult to go to the field at night to monitor the water level to ensure that the rice grows well. Before I was too scared to go to the fields by myself but since I do not have any choice, I have learned to overcome my fears. I have to go to the field to let water into the rice fields and wait until the water level is sufficient. I wish my husband was here but I know we have to sacrifice so that we can put our children into school."

Women who live alone feel vulnerable and many have to rely on neighbours for protection.

The experiences of the women quoted are typical of some 800 farming households that the researchers have talked with in Thailand, Vietnam and the Philippines. To poor farming families in Asia, migration is a survival strategy where most of the off-farm income is spent on food, debt payments, children's education and farm inputs.

In Australia, results of similar focus group discussions showed that many women are engaged in off-farm work to supplement household income. At the same time, they also make significant contributions to on-farm work.

"We are currently having in-depth discussions with households to look in more detail at the unique personal, social and economic constraints faced by women who are heading up or managing farms, compared to those headed up by men," Dr Paris says. "We hope to identify policies, technologies, training and extension practices that might overcome these problems. This might include training courses in integrated pest management, the efficient use of water and nutrient management."

Local on-farm strategies and activities will be tested by 60 women who are heads of farms in selected villages in the Philippines, Thailand and Vietnam. The Australian project will focus on the capacity building of women farmers and may include training about supply chain marketing, new and emerging markets, information technology and leadership in agriculture.

"Understanding the impact of migration and off-farm work on farming is important in improving agricultural productivity and the well-being of farm families in all risky farming environments," Dr Paris says. ◂

Other project team members include Chaicharn Wongsanum at Khon Kaen University, Thailand, T Chi at Cu Ulong Delta Rice Research Institute and Joyce Luis at the Social Sciences Division, IRRI.

Watching the water ways

REALLOCATING WATER COULD HELP BOOST AGRICULTURAL PRODUCTION IN CHINA. REBECCA THYER REPORTS ON A PROJECT BUILDING THE NECESSARY POLICY FRAMEWORK

PARTNER COUNTRIES: China, Australia PROJECT: ADP/2000/120: Institutions and policies for improving water allocation and management in the Yellow River Basin, China DESCRIPTION: By creating the right policy framework, this project aims to help improve water use in China CONTACT: Anna Heaney, ABARE, Anna.Heaney@abare.gov.au

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Hukou Waterfall on the Yellow River.

China's booming economy and rapid population growth have increased industrial and urban sectors' demands for fresh water, placing increasing pressure on water resources that remain available for agriculture.

About two-thirds of China's cultivated land is in the Yellow River Basin, but it has less than a quarter of the nation's water resources. One possible answer to this disparity is to reallocate water to higher-value crops and more productive areas, which in turn would also increase the value of agricultural production by an estimated one billion Yuan (A$165 million) a year (almost a two per cent rise).

The benefits of water reallocation were uncovered through an ACIAR-funded modelling project led by the Australian Bureau of Agricultural and Resource Economics (ABARE), in collaboration with the Center for Chinese Agricultural Policy and the International Water Management Institute.

A project team member, ABARE's Anna Heaney, says water in China is state-owned and irrigation districts are granted a right to withdraw a fixed volume of water from a river or dam. This water is then distributed by canal to villages. Allocations are made administratively without differentiating between land type or crop sown.

"By concentrating on areas with better potential and diverting water to these areas, China could boost its agricultural returns," Ms Heaney says.

However, before those benefits can be realised, water property rights and exchange rules must be defined and evaluated, or those in water-exporting areas will suffer.

"Because farmers do not own the rights to the water, those in the poorer agricultural regions that give up their water will not receive the benefits from water sales," she says. "That's why compensation is important and it needs to be in place before China can realise the benefits of water reallocation."

Providing incentives to save water and reallocating water resources to best meet competing demands are important aspects of both water and agricultural policy reform in China. "The drive to change water policy is already there," Ms Heaney says. "We're working to develop systems of water property rights and exchange rules to underpin the more efficient use of water resources in the Yellow River Basin."

If farmers in water-exporting regions held the property rights to transferred water, income from water sales could offset lost income from reduced agricultural production. Revenue from water sales could see those incomes rise substantially – income from water sales is estimated at 500 million Yuan a year.

But without compensation, the regions with the lowest incomes are likely to be affected most.

Ms Heaney says the team has looked at the benefits of reallocation from a provincial level. "We are now working out the benefits at a village and irrigation district scale, and looking into what kind of institutions are needed to do that."

Results from this analysis will be presented at the International Association of Agricultural Economists meeting in August 2006. ◂