

A delegation of KADAMA and KALIKASAN farmers visited five NGO-supported farmer groups to exchange experiences on developments in LEISA rice production. These groups were the Bukidnon Centre for Sustainable Agriculture (BCSA); Technical Assistance Centre for the Development of Rural and

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Urban Poor (TACDRUP); the Community-based Native Seeds Research Centre (CONSERVE) in Mindanao; Infanta Integrated Community Development Assistance Incorporated (ICDAI) and Philippine Rural Reconstruction Movement-Camarines Sur

their land to other cash crops such as coconut, sweet potato, corn and citrus. The area under organic rice is relatively small and the family can easily provide the labour and organic materials required.

### Experiences gained so far

Both indigenous traditional rice varieties (ITRV), traditional rice varieties (TRV) and high yielding varieties (HYVs) are used in organic and pesticide-free rice production. BCSA (MASIPAG) and CONSERVE advocate the use of TRVs and ITRVs in organic rice farming. They train farmers in seed selection and breeding to increase yield and lessen dependency.

Some farmers do not spray while others rely on botanical pesticides made from 'makabubay', 'sili', 'madre cacao', 'lagumbre', and 'amarillo' claiming that

tractors are used to incorporate rice straw into the soil. This hand tractor, called a 'turtle', can cut rice straw more easily than the usual hand tractor used in Luzon, making incorporation faster and easier. There are adequate amounts of water and rice straw is almost completely decomposed by the time transplanting takes place.

In most groups LEISA rice farming works because of the heavy support provided by the NGOs, the academe and the diocese. In the ICDAI programme, where a participatory and relatively broad approach is being followed, conversion to LEISA has been easier and faster even with minimal support.

### Still a long way to go

It was observed that there were still many problems in LEISA rice production. Only chicken manure and commercial organic fertilisers are used and this makes farmers dependent on those producing these organic external inputs. A case in point is TACDRUP who import chicken manure pellets from the Netherlands. As chicken manure decompose easily and contains high amounts of nitrogen its application may lead to higher nitrogen losses than from the chemical nitrogen fertilisers used in conventional agriculture. The presence of heavy metals and toxins in poultry feed also makes it non-sustainable in the long term. Biodiversity is still very low on organic farms but a further evolution of organic rice production toward more integrated systems should stimulate biodiversity.

Farmers gave several reasons for the limited adoption of organic rice production. Yields were lower during the transition phase; organic farming is laborious and raw chicken manure has a foul smell; organic fertilisers are in short supply and farmers who do not own their land will not invest in organic farming. Some prefer conventional farming because they think chemical fertilisers and pesticides are more effective or they are put off by the unstable and low prices offered for TRVs. Farmers felt there was a general lack of support for LEISA farming and that organic farmers are sometimes ridiculed.

LEISA rice production in the Philippines still has a long way to go before any large-scale adoption can be envisaged or sustainable integrated systems have been developed. Nevertheless, the members of the KADAMA and KALIKASAN delegation concluded that the farmers visited, although they had only had two to five years' experience with LEISA rice production, were clearly on the right track. ■

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photo: Ria Niehe-Tevens

## What farmers learned from other farmers

Branch (PRRM-CamSur) in Luzon. BCSA is involved in the MASIPAG programme. Most of the farmers supported by TACDRUP and ICDAI follow a pesticide free or low-external-input approach while the others practice organic agriculture. The five groups visited included some 300 organic farmers with about 400ha of organic rice yielding an average 3-5t/ha.

Discussions made it clear that farmers are motivated for LEISA rice farming because of it offers environmental and health benefits. It also requires less capital and leads to cost reduction and improved incomes. Farmers also benefit from premium price, household food security and improved soils.

Most farmers involved in these NGO programmes are small farmers who can afford to produce organic rice because they own their land and derive an income from other livelihood activities. Many farmers grow rice mainly for home consumption and devote the largest portion of

traditional varieties are resistant to black bug, for example, a major rice pest in Mindanao. Other use chemical pesticides.

Many farmers experienced a serious drop in yield during the first 4 to 6 cropping seasons. This was discouraging. Farmers who initially applied a combination of chemical and organic fertilisers had fewer problems. Later yields improved as soils became more fertile. Now, yields come close to those achieved in conventional agriculture but costs are less and farmers are able to avoid debt. Initially only relatively low amounts of organic fertilisers were used. Some farmers only used rice straw as fertiliser. They found this was insufficient to maintain yield during the transition phase. After the soil has been regenerated and yield brought up to an acceptable level some farmers succeeded - at least for a time - in sustaining high yields with zero purchased external inputs.

Rice straw and chicken manure are the main organic fertilisers. In Mindanao, rotary