

KALIKASAN: aiming at integrated organic agriculture



Kalikasan has received national recognition for its organic rice production.

PHOTO: BERT LOT

In 1992, after a PRRM facilitated training in Low External Input Rice Production (LEIRP = LEISA), seven farmers from Lupao, Munoz and Guimba in Nueva Ecija province started to experiment with organic farming and TRV/ITRV seeds from the MASIPAG programme. The results were satisfactory, the experiments were replicated and more farmers were trained. In 1993, 64 farmers founded KALIKASAN-NE. Their aim was to develop sustainable rice-based organic agriculture. Each cooperator devoted about one hectare of his or her land to organic rice production.

An Alternative Trading and Marketing (ATM) programme was started in a joint business venture with PRRM, a premium price was obtained for organic rice and a crop production loan scheme of P10,000.00 was extended to each farmer.

KALIKASAN's activities include the provision of technical assistance, the training of new members and making inputs such as chicken manure and rice seedlings available to farmers. This has resulted in a considerable reduction in production costs and an increase in the net income of farmer cooperators. Farmers have to pay an annual membership fee of P50.00 and a P1,200.00 contribution to capital build up.

Toward integrated organic agriculture

In 1997, KALIKASAN-NE had 179 farmer cooperators cultivating some 142 ha of organic rice. During the early years yields dropped. However, after four years of organic rice production farmers succeeded in increasing yield to between 4.5 and 5 ton about the same amount as produced on conventional rice farms. The recommended application of chicken manure on clayey and sandy soils is 40 and 60 bags/ha (1 bag = 50 kg.) respectively in the first season. The application is reduced by 10 bags/ha each season until only 10 bags/ha are required in the fourth season on clayey soil and the sixth season on sandy soil. Some farmers have succeeded in sustaining high yields for a time without applying inputs.

Various ITRVs and TRVs (M-88, Benggawan, Wagwag, Sikades, Milagrosa, Ag-14, Ag-10, Ag-8, Ag-5, Brown Rice, Elon-elon and Muguama) are being tested in demonstration farms. Farmers prefer Ag 5 and Ag 8 because of their strong vegetative growth, prolific tillering, grain filling capacity and medium height as well as their resistance to lodging, pests and diseases and palatability. Ag-5, Ag-8, Ag-10 and Benggawan proved resistant to 'tungro' virus in the 1994 rainy season

when HYVs suffered serious attack.

Although there are generally fewer pest problems in organic rice, farmers do use biological pesticides. Some farmers successfully experiment with both traditional and new methods of pest management.

Box 1 Pest management: the example of the Golden Snail

Mario Imperio from Triala, Guimba, experimented with the pest control techniques used by his ancestors. One technique involved placing pounded 'makabubay' vines in the waterways of rice field so that the bitter sap would be washed out by the water and carried to the Golden Snails' breeding ground. Another method was to lure snails to 'gabi', papaya and banana leaves that had been scattered in the rice field in the early morning. The leaves were collected before noon when the snails had moved onto them. The third experiment involved water management. Small canals filled with rice bran were built along the banks of the rice field. All three experiments were successful.

KALIKASAN-NE farmers are well known throughout the Philippines for their success in developing organic rice farming and marketing. Their partnership with the ILEIA Research Programme helped KALIKASAN to obtain quantitative proof of the economic viability of their organic practices. It also strengthened their skill in carrying out experiments designed to develop farming systems that were well adapted to their conditions, needs and objectives. This further consolidated their position in relation to conventional farmers, scientists and policy makers. Membership has increased rapidly and by 1998 there were 259 members in 18 communities.

Farmers recently started experimenting with organic vegetable production. They aim to gradually evolve their rice farming systems into diverse integrated farming systems. Farmers intend to experiment with soil fertility management, plant breeding, conservation of genetic resources, and diversification.

Summarized from: Maria Lina, Danilo Gatchalian, Florencio Galapon Jr., 1998. **KALIKASAN-NE: a documentation and evaluation of experiences in sustainable agriculture**. Internal report of the ILEIA Research Programme. Published in Filipino in 'Balang Buhay, Tomo I, Bilang I, 1999. KALIKASAN-NE / PRRM-NE, Bukang Liwayway, Bantug, Muñoz, Nueva Ecija, Central Luzon, The Philippines.