

### 4.3 EMPOWERMENT OF THARU INDIGENOUS KNOWLEDGE

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*The Tharu indigenous people live in the southern plains of Nepal and have been confronted with the western model of development over the last decades. In an attempt to revive the Tharu traditional culture, ECOS (Ecological Services Centre) has documented traditional knowledge and stimulated experimentation in the area of Dibya Nagar. Moreover, traditional institutions were supported and advocacy activities initiated, to stimulate recognition of Tharu rights in the local government.*

The Tharu have lived for at least 600 years in Chitwan, the tropical plains of Nepal, at some 145 kilometres southwest of the capital, Kathmandu. Chitwan is regarded as the source of ancient Indian and Nepalese cultures. For example, Lumbini, on the south-western Chitwan plains, is considered the birthplace of Lord Buddha. In 1973 one thousand square kilometres of this jungle were declared Royal Chitwan National Park, which is now world famous for its bio-diversity and wildlife, and popular among tourists who want to observe the horned rhino, the Bengal tiger or the Ghadiyal crocodile.

Before 1960, the Rapti and Narayani rivers were the main mode of transport and trade in Chitwan, next to food trails. Oxen were used for ploughing, seeds were exchanged and there was a close relationship between biodiversity and the festivals celebrated by the Tharu people. Over the past 50 years, however, major changes have occurred. In 1956, a USAID supported malaria eradication programme decimated the mosquito population, which enabled the implementation of a resettlement scheme through which Hindus and Buddhists migrated from the mid hills to the lowland plains. During 1960s, the agro-chemicals for agriculture were subsidised, favouring the more educated and rich migrant farmers. When the jungle was declared National Park, the Tharu people were deprived of utilising its natural resources, which formed part of their livelihoods. They were only permitted to enter the jungle a few times per year to collect herbs, grasses for thatch, or to utilise wood from specific trees for musical instruments.

#### Tharu cosmovision

By origin, the Tharu believe that supernatural beings residing in nature guide them in their daily life. They worship God in the form of natural forests, streams, rivers or a single tree, and can therefore be considered animists. Tharu have a totemic identity: the different ethnic groups have a specific plant or animal as their totem. Forests are protected by a Goddess, who is worshipped and asked for peace, prosperity and protection. For worshipping there are three types of temples: the first one is at the household level to worship the family deities, the second one is at the house of the *Gurau*, or spiritual leader. Here the Gurau meditates and performs rituals, for example to heal a person. The third type is the public temple, usually built close to a Pipal tree, or any other sacred tree, and it is here that public rituals take place. Astrological information is applied for several agriculture related activities, such as seed selection. *Mantras*, or ritual verses, are chanted to influence the envi-

ronment, for example to stop heavy rains during beginning of monsoon. The Tharu also celebrate Hindu festivals.

Tharu women are the guardians of culture and tradition. For example, they do the majority of wall paintings before *Deepavali* - the festival of Lights and Cow in November. According to Tharu women, the major purpose of wall painting is to please the Goddess of wealth, called *Laxmi*. At the same time the cow is worshipped for good fortune in the house, as this animal is considered a major source of wealth. Sacred plants and trees, such as *Ficus religiosa* and *Ficus benjamina*, are often planted around the house.

**Changing cultural identity.** When the external influences based on the western model of development entered Chitwan, the traditional way of living of the Tharu people was seriously challenged. Over the years, the Tharu have adopted festivals and rituals of the migrant population and increasingly followed the modern monetary-based way of life. With this erosion of their cultural identity, even simple issues became complicated. For example, a dispute between people, which was earlier solved within the community, is now brought to the police and court. Extended families became nuclear families, allopathic medicine is replacing herbal medicine. The long tradition of cultural festivals related to agriculture and health, as well as indigenous thoughts and values, are gradually declining.

In Dibya Nagar farm sizes are small (0.5 ha) to medium (1.0 ha) and most Tharu farmers keep a buffalo and some goats. Major crops are rice, maize, wheat, finger millet and mustard. The majority of farmers use chemical inputs, though often not according to recommendations. There is quite some awareness, however, of the negative effects: poisoning, deterioration of soil life, increase of harmful insects and decrease of predators, such as the dragon fly, fire fly and tiger beetle. Older people recall that some 35 years ago, Chitwan was one of the best areas for paddy rice and mustard. But nowadays, even with high levels of external inputs, the former yields are hard to obtain. As Sikkha Gurau, the spiritual leader of the Tharu, states: *"Our people are trying to live the modern way without knowing its long term effect or consequences. Very little emphasis is given to revive the culture and indigenous value systems of the people. When the elderly people are gone, everything will be finished and our culture will disappear."*

## Revitalising Tharu indigenous knowledge

Ecological Services Centre, or ECOS, is an NGO which started implementing field programmes since 1995 in Devghat, in the midhills of Nepal. It has 7 staff members, working on community development, with programmes such as literacy, local saving and credit schemes, as well as health and sanitation. It also includes technical assistance for small water supply systems, agroforestry, forest protection, organic and bio-dynamic agriculture, and kitchen vegetable gardening. The mission of ECOS is: 'to facilitate the empowerment of the rural poor in a way which involves them directly and actively to improve their social, economic and environmental well-being.'

Dibya Nagar is the area with several scattered Tharu settlements, where ECOS started working in the context of the Compass programme in 1997. The main objectives were to recognise the importance of indigenous knowledge for sustainable development, to

enhance the communication among farmers, and between farmers, ECOS staff and researchers, and to protect the property rights of the Tharu people. After discussions with farmers, Tharu leaders and school teachers it was decided to revive the indigenous system of agriculture, and to complement it with recently developed practices from organic agriculture, such as the use of Effective Micro-organisms (EM), bio-pesticides, and post harvest protection techniques. The methodology of ECOS includes experimenting with practices based on indigenous knowledge, empowerment of local institutions, and networking.

**Revitalising spiritual and cultural practices.** Several other activities were also implemented to revive Tharu culture. During a village fair, organised in December 2000, a Tharu house with traditional architecture and wall paintings was selected to exhibit traditional tools and equipment, costumes, ornaments and other art material. Some 3,000 people visited this site and the main interest of the visitors was to know how these traditions can enhance the environmental protection and health of the people today. Moreover, Tharu elders are sharing their indigenous knowledge on agriculture and health, the experiments, and their social ethics twice a year with school children. Community members have revitalised their songs, costumes, dance and musical instruments. This approach increased the interest of the children as well as their parents about the need for reviving indigenous knowledge and social organisation.

**Experiments.** In 1998 and 1999, experiments in paddy rice were set up with 18 farmers to compare chemical inputs, compost with Effective Micro-organisms, and compost with auspicious dates for sowing according to astrology. In February 2002, this fertilization experiment was continued with maize, comparing different treatments: only compost, compost with EM, and only EM. The type of information collected was the effect on plant growth, pest infestation, soil moisture content, soil friability and crop yield. ECOS has encountered considerable difficulty in developing a good methodological framework for these experiments, however, and so far no clear results have been achieved.

In 1999, a second experiment with a Tharu ritual to protect the crop from pests and diseases, called *Hari Hari Barna*, was started with paddy rice, which was replicated in 2000. The ritual is performed by the Sikkha Gurau in the period June-August, based on astrological calculations. The ritual consisted of putting a mud pot with sacred rice seeds in the centre of a rice plot, with coloured leaves and flowers as offerings around it, and combined with the chanting of specific mantras. This experiment was carried out at three places, again with three different treatments: the first crop was protected with this ritual and biopesticides, on the second plot only biopesticides were applied, and on a control plot, no ritual nor bio-pesticide was applied. The farmers monitored the progress through regular field visits, and information was collected about the number of harmful insects, the incidence of diseases and other physiological disorders. Clear effects of the different treatments could not be determined, however.

**Discussion.** ECOS is an organisation with a good track record in organic farming and rural development. However, skills are lacking to develop a systematic approach for experimentation and systematic research that includes cosmovision aspects. To improve this,

ECOS has now established formal linkages with the Kathmandu University to get more support on their experiments with indigenous practices.

Initially, it was difficult to motivate the ECOS staff and the farmers in the area into the topic of cosmovision. This was due to several factors, like the complexity of the local cultures in the area, with a mix of indigenous Tharu, Hindu and Buddhist communities. Also the fact that only the project leader speaks English inhibited the full participation and mutual learning of other staff in the discussions with other Compas members.

Mr Uttam Kumar Chaudhary, a Tharu farmer has worked intensively with the programme as a local promoter. According to him, ECOS should focus on deepening the understanding of the importance of rituals and share the findings, especially with youngsters. He suggests to continue the programme at the local schools and to establish a museum about Tharu culture, showing their tradition, agricultural tools and implements, as well as traditional varieties of paddy, maize, wheat and certain herbs that are beneficial for specific diseases.

Other Tharu farmer leaders and Sikkha Gurau also express their enthusiasm about the work, which has resulted enhanced recognition of the Tharu in the negotiations with the government on issues like bufferzones, indigenous rights and protected areas in the Royal Chitwan National Park. ECOS was also invited to assist in formulating the development plans for the Dibya Nagar and Meghauri area, based on culture, cosmovision and sustainable agriculture.

In order to strengthen the work on indigenous knowledge and cosmovision, ECOS plans to build a national network with universities and NGOs for information sharing, research and lobbying. In this way it is hoped to complement the modernisation trend and respond to the increasing demand from farmers to work on the basis of cultural heritage towards sustainable agriculture.



*Mr Uttam Kumar Chaudhary, a Tharu farmer and ECOS' local promotor.*