Traditional products and practices of indigenous people inhabiting
Ramanathapuram district of Tamil Nadu

Rathakrishnan T*, Anandaraja N, Ramasubramanian M & Kalai Selvan S
Department of Agricultural Extension and Rural Sociology,
Agricultural College & Research Institute, Madurai 625 104, Tamil Nadu
E-mail: anandaraja_n@rediffmail.com

Received 30 April 2007; revised 27 August 2007

Traditional knowledge plays a crucial role in establishing sustainable relationship between man and nature in the society more dependent on natural environment for their varied needs. A study was undertaken to document the indigenous products and practices related to non-farming livelihood activities of Ramanathapuram district. The data was collected with the help of focused group discussion and practitioner participatory approach. In the paper, indigenous materials with respect to non-farming livelihood activities of the people of Ramanathapuram district such as palm leaf products, traditional fishing devices and charcoal making process (Mootam) are discussed.

Keywords: Ramanathapuram, Palm leaf, Traditional basket making, Traditional mat weaving, Traditional boats, Catamaran, Kattumaram, Traditional fishing net, Karaivali, Mootam, Charcoal making process

IPC Int. Cl. 8: B27, G10D

In Tamil Nadu, Ramanathapuram district is located in the southern part of the state lying in the latitude between 9°.05′ and 9°.50′ in North and longitude between 78°.10′ and 79°.27′ in East. It is one of the major drought prone districts of Tamil Nadu. The district has a hot tropical climate with temperature ranging between 22.3°-37.8°C and very high relative humidity ranging from 80-90% in coastal tracts1. The rainfall distribution of Ramanathapuram district is uneven and is less than 870 mm per annum. Paddy is being cultivated in rainfed conditions apart from dry chillies, rainfed cotton, pulses and oilseeds. As the rainfed farming is not profitable to farmers, they are moving towards agro-based non-farming activities of palm products manufacturing and charcoal making2. Many of the people living away from the coastal areas of Ramanathapuram are mainly involved in agro-based non-farming activities. People dwelling in coastal area are involved in fishing. There is a need to create employment in the non-crop sector by diversifying agriculture through dairying, fish culture and agro-based industries3. Public actions and investments have implications for the participation of rural farm households in non-farm pursuits4. The labour migration out of agriculture sector is responsive to market forces and particularly to the sectoral income gap between farm sector and agro-based non-farming activities5.

All the people involved in agro-based non-farming activities have been following traditional practices from time immemorial. Indigenous technical knowledge is local/traditional knowledge, which is unique to a given culture, society, or place. Indigenous knowledge is the accumulated knowledge, skills and technology6. Traditional knowledge plays a crucial role in establishing sustainable relationship between man and nature in the communities more dependent on nature for their varied needs7. Unfortunately, little importance has been given to the essence of such skill, and their extinction affect ecological, cultural, and social diversities. It is quite different from the knowledge generated by research institutions. Indigenous knowledge is the basis for local level decision making in agriculture, horticulture, animal husbandry, healthcare and various other activities in rural communities. ITK, of late has attracted the attention of researchers and development personnel worldwide. There are very many indigenous non-farm livelihood options available in Ramanathapuram district, which are unique to its own. A study was conducted to document these indigenous non-farming practices.

*Corresponding author
Methodology
The Department of Agricultural Extension and Rural Sociology, Agricultural College and Research Institute, Madurai is operating a research project entitled *Documentation and Preservation of Agricultural Traditional Knowledge through Farmer Participatory Approach*. One of the objectives is digital documentation of ITK’s in agro-based non-farming allied activities. The list of Farmers Discussion Group (FDG) and key informants of different villages were gathered. Thereafter, data were collected using focused group discussion method and Practitioner Participatory Approach (PPA). Focused group discussion involves intensive discussion and interviewing of small groups of people on a given focus or issue instead of collecting information from individuals. PPA is a systematic, semi structured approach that uses a combination of methods to assess and understand a community’s situation or a particular problem with the participation of local people. Verification of information collected from different informants and at different time was carried. Only the specific and reliable information after cross checking has been incorporated. Indigenous practices followed by people of Ramanathapuram as survival strategies are as follows:

Palm leaf basket making
Palm leaf basket plaiting and palm leaf mat weaving are the community based occupations in Ramanathapuram district (Figs. 1-3). The people engaged in this occupation buy palm leaves from adjacent areas of their respective villages. Palm leaf box, hat and mat weaving are done by Sathuvakathi, a knife especially made for palm leaf products. It is specially made with curved portion on top. The edged top portion of Sathuvakathi is used for tearing of palm leaves and back point is used for punching of palm leaves while making palm leaf products. The price of the palm leaf baskets is fixed, based on size and colours used for decorating the basket. The plastic wire is also added to add value to the palm leaf basket. The palm leaf mat is made from matured leaves and the younger palm leaves (kuruthu) are used for basket, Kottan and hat making. Palm leaf mats are used in ships, drying of grains and in packing of fish ice boxes. The younger palm leaves, known as vidali are used as brushes. The palm eikki (fronds) are exported from Trichy and Tuticorin areas. Larger kuruthu palm leaves are used for narpetti (larger size basket) making and smaller kuruthu palm leaves are used for fine mat weaving. As the rainfed farming is not profitable because of failure of monsoon, these people are engaged in palm leaf product business.

Palm leaf mat weaving
Palm leaf mats are produced from matured palm leaves and for this, palm leaf bundle (kattu) is purchased from nearby places. One palm leaf bundle roughly contains 40 palm leaves. Some times, palm leaves are alone bought leaving the fronds. There are 3 types of mats made from palm leaves, ordinary mat, nice mat, and kurutholai mat. The longevity of ordinary mat is just one day, nice mat can be kept for 2 months; kurutholai mat having longevity of more than 2 months is used for drying of paddy and resting small children. In a day, one person can make 6-7 ordinary mats or only one kurutholai mat. Small type of kottans (containers) and archani thattus (pooja baskets) are made by palm leaves. Jaggery is kept in kottans for safe transport. Sathuvakathi used for making basket is also used for making palm leaf mat.

Palm leaf winnower
Palm leaf winnower (sulavu) is used for separation of dried seeds and removal of weed seeds & stones. Its operation is very easy.

Traditional fishing boat (Kattumaram)
Catamaran (Kattumaram) is traditionally used for fishing and is a traditional way of harvesting marine life without damaging the marine ecology and its biodiversity. It is made up several woods (larger and smaller) of kalyana murungai (*Erythrina indica*) as it has good floating capacity in sea. The tree selected to make catamaran is cut down in *crescent moon* period, which is kept for 15 days. Thereafter, it is heated to remove outer bark. *Kattumaram* is kept for 4-5 yrs based on intensity of usage in sea. The larger woods of *Erythrina indica* is kept in the periphery, while in the middle slightly bigger woods are kept. Finally, these arranged woods are tied horizontally with wood and rope. Fishing is done up to 7 in the evening using *Kattumaram*. Fishermen using *kattumaram* catch up to 4 kg fish up to 4 km range in the sea.

Fishing equipments-Karaivalai
Traditional fishing net is made out of coir consisting of three particles in it, boya, purai and stone (Fig. 6). *Boya* is on the top of the net while
fishing and stone are fixed in lower part of the net. The karaivalai can be used up to 1 km in sea and the optimum time to use this is morning hrs (Fig. 5). There is a separate boat made from nava, vahai trees for using Karaivalai known as karaivalaithoni. In the large sized karaivalaithoni, 10 members can fish and in the smaller size, only 5-6 members can fish in the sea. Karaivalai has large sized holes than nylon net (marukku valai). Karaivalai can be used only for 3 yrs. The bag, which is used to keep fishes after catching, is known as kacha. karaivalai is used to catch fish varieties like nagarai, sundai, mura, sheela, vazhai and ora.

Charcoal making process (Mootam)

Charcoal making is one of the traditional practices to get income in the rainfed tracts of Ramnad district in off seasons. Mootam is generally prepared in non-farming periods during January-September (Fig. 4). The burning and the process of charcoal making require 7 days. A heap of pyramid like structure by keeping roots of karuvel (Acacia sp.) is prepared. These karuvel roots are collected and then, secondary roots, tertiary roots (Sulli) and stem portion are kept on the heap. If sorghum sticks or ragi sticks is available, they are also kept over it for making moottam. Finally, it is covered with sand outside and water is applied over it. After burning inside over a week, it changes to charcoal pieces. Mottam varies in size from 50-500 kg, based on need of coal preparation. Mostly, charcoal is used in chemical factories for burning purpose. It is transported to Madurai and Trichy districts. The big sized coals formed from the roots of karuvel are graded as first quality; medium sized coals as second quality and third quality, while powdered coal is graded as last quality.

Conclusion

These palm products have wide scope of export potential if production of palm leaf products is properly expanded to cottage level industry. Palm tree prevents soil erosion and protects natural wealth. Palm products are eco-friendly in nature. Efforts need to be taken to develop and fully utilise palm products for the improvement of standard of living of the rural palm product workers and artisans. The cultivation of palm trees especially for palm products may prevent the migration, which are common phenomena in drought prone villages. The backwardness of agriculture especially in dry land agriculture in rural areas may be the reason for migration\(^8\). By knowing the importance of charcoal making, now some companies have also entered this business recently. Sometimes, the per capita earnings from wage employment were higher in non-farm sectors than from self-employment or from dry land agriculture, which should be exploited to the fullest extent possible\(^9\).

Acknowledgement

Authors are highly thankful to the farmers of the Ramanathapuram district for providing valuable information and cooperation for sharing traditional knowledge. Authors are indebted to DSIR, New Delhi for funding the project.

References