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WEALTH OF NON TIMBER FOREST PRODUCTS AND THEIR TRADE IN JAMMU AND KASHMIR

S.A. GANGOO, M.A. ISLAM AND TAHIR MUSHTAQ

S.K. University of Agricultural Sciences and Technology of Kashmir
Benhama, Ganderbal- J&K, India
E-mail: gangoo_sajad@yahoo.com

ABSTRACT

Globally NTFP / NWFP are defined as "forest products consisting of goods of biological origin other than wood, derived from forest, other wood land and trees outside forests". The Non Timber Forest Products (NTFPs) of Jammu and Kashmir are generally collected by the State Forest Department through lease to contractors. The state harbours a large variety of miscellaneous NTFP species that are collected by its people for self-use or petty sale to generate a part of their annual income. The dependence of local people on the NTFP resources reflects the significant impact of NTFPs on the local economy of the people of J & K. Studies conducted under sub project of Networking Project on NTFP funded by ICFRE Dehradun investigated the level of livelihood dependency on various NTFPs in J&K. The livelihood dependency on wicker handicraft has been studied in district Pulwama. Dependence on *Punica granatum* in livelihood of the people of district Ramban reveals that the anardana has a major share amounting to 48.78% in the net income of every household in the study area. Survey conducted in the markets of J&K revealed that different species are being sold in two different markets. This trade has been recorded from 2011 to 2015. NTFPs have a tremendous potential to involve local collectors for establishing micro-, small- and medium enterprises.

Key words: Livelihood, *Punica granatum, Pinus gerardiana,* NTFPs, Wicker.

Introduction

Jammu and Kashmir, a hilly state situated in extreme north of India in Himalayan ranges and located between 32^{0}15' to 37^{0}05' latitude north and 72^{0}35' to 80^{0}20' longitude east, has a geographical area of 222,236 km^2 (Anon., 2011). The state, constituting about 6.93% of India's total geographical area, is a veritable showcase of the floristic and faunal richness of the north-western Himalayan ranges. It is bounded by China in the north and east, by Afghanistan in the north-west and by Pakistan in the west. Punjab and Himachal Pradesh States border it in the south. This rich biological diversity is enshrined in its different agro-climatic zones and vegetation types that are found along its vast altitudinal gradient ranging from about 350 m along the plains to more than 8700 m asl along the inner Himalayan ranges. Forests are one of the most important resources of Jammu and Kashmir, providing employment and mean of livelihood to a vast array of population particularly those living on the fringes of forests. Spread over 20,230 km^2 of the demarcated area, forests accounts for 10.14 % of the total geographical area of the state (including area outside the LoC). The forests are a major support base for large number of commercial activities like chemicals, oils, woodcrafts and handicrafts *vis a vis* providing timber, fuelwood, edible products, medicinal herbs etc. for local consumption and for generating cash income. Local populations are very much dependent on the NTFP resources for their day-to-day needs. Jammu and Kashmir is home to a vast array of species of flowering plants that makes it a veritable showcase of the floristic diversity of the western Himalayas. This rich floristic diversity is a function of the wide range of altitude and annual precipitation, so typical of the state. The lower southern parts of the state, covering the low altitude sub-tropical zone, harbor the sub-tropical type of vegetation, the mid to high altitude temperate zone of the state bears temperate type of vegetation and alpine type of vegetation is met with at higher elevations. The trans- Himalayan region, receiving very low precipitation and designated as cold desert, bears only scrub type of vegetation. The rich floristic diversity in the state has been a rich source of NTFPs for its people. The fact that the people of the state collect a large number of NTFPs for self-use or trade has been well recognised. `

Material and Methods

The study on wicker work was conducted using multi-stage random sampling technique. In first stage, twenty sample villages having four villages from each block namely, Tral, Pampora, Kakapora, Keller and Pulwama were selected by simple random sampling

Dependence on anardana in livelihood of the people of Ramban district has a major share amounting to 48.78% in the net income of every household.

technique. The sample villages selected were Dadasora, Bathnoor, Panzoo and Satoora from Tral block; Krew, Sharshali, Woyan and Chandhara from Pampora block; Lelhar, Narbal, Pahoo and Larew from Kakpora block; Rajpora, Abhama, Achagoze and Rehmoo from Keller block; and Reshipora, Renzipora, Beigpora and Grawgund from Pulwama block. The present study analyzed the socio-economic profile of the wicker handicrafts makers, status of wicker collection, manufacture of wicker handicrafts and its marketing, livelihood contribution of wicker handicraft, influence of socio-economic characteristics on livelihood dependency on wicker handicraft and encouraging and discouraging factors of wicker handicraft using Ex-Post-Facto Research Design.

The study on anardana (*Punica granatum*) was conducted during the year 2014-2015 in the rural pockets of Ramban district of Jammu and Kashmir. For the purpose of study 10 Village were selected through random selection of the representing areas to obtain the primary data regarding the collection and trade of Anardana in this region, 10% of households living in these villages were surveyed. The information on Anardana (*Punica granatum*) and their traditional uses was gathered through well – structured questionnaires, interviews and observations with local people as they have a sound knowledge of the plants growing in their vicinity. The questionnaires was designed to meet the objectives of the study, tested in the field and standardized for the purpose. Total 200 resource people were interviewed through questionnaires of which 178 were male and only 22 were female. All the resource persons identified were in the age group of 35–85 years out of which eighty five were between age group of 30 to 50 and rests were above 50 years old

A study conducted on the role of Chilgoza (*Pinus gerardiana*) in livelihood of the people of Paddar valley of Kishtwar district of Jammu and Kashmir. Eight villages were surveyed and contribution of Chilgoza viz a viz the agricultural crops and labour, which are the other two major contributors of livelihood, was studied.

The study on raw drug trade was carried out in two districts, Jammu and Srinagar of Jammu and Kashmir State. These two districts were surveyed to collect information regarding plant raw drug trade of medicinal and aromatic plants in the region. The Srinagar and Jammu are the capital cities of the state and trade mandis are only here. The data was collected from traders who are in direct trade of medicinal and aromatic Plants. Data was also collected from two points along LoC (Poonch and Uri) to know the actual export and import of medicinal and aromatic plants in the State.

Results and Discussion

Contribution of wicker collection and manufacture: The total collection of wickers from different sources in the surveyed population was found to be 61.71 tons annum^{-1} @ 0.62 tons per household annum^{-1}. The total wicker collection was differentiated as: *Parrotia jacquemontiana* (58.01%), *Indigofera pulchella* (30.38%), *Salix triandra* (6.87%), *Cotoneaster baciliaris* (3.24%) and *Salix viminalis* (1.50%) in the sample households. Out of the total extraction, 91.72 per cent was secured from forests and rest (8.37%) from agroforestry and homestead forestry. The collection of wickers generated an employment of 973.17 mandays annum^{-1} @ 9.73 household^{-1} annum^{-1} (Table 1). The data regarding type of wicker handicraft manufactured, wicker species used, quantity of wicker utilized (kg), employment (mandays), number of handicrafts produced/ annum, sale price (`) and income (`) generated in the sample households have been summarized in the Table 2. It is evident from the data that the manufacture of wicker handicrafts generated an income of ` 59534.70/ household/ annum with an employment of 219.38 mandays/ household/ annum. The *kangri* fetched highest earning (` 39,38,500/ annum) among surveyed households followed by *dakri* (` 13,00,000/ annum), *karngul* (` 2,55,000/ annum), apple basket

Table 1: Collection of wickers in the sample households.

Sl. No.	Wicker type/ Species	Source (Tons)	Quantity collected (Tons)	Employment (Mandays)	
				Manday (s) required/ Tons	Size of employment (Mandays/ annum)
1.	*Parrotia jacquemontiana*	Forest - 56.55 (91.64)	35.80 (58.01)	15.0	537.00
2.	*Indigofera pulchella*		18.75 (30.38)	15.0	281.25
3.	*Cotoneaster baciliaris*		2.00 (3.24)	15.0	30.00
4.	*Salix triandra*	Agroforestry/ Homestead forestry- 5.16	4.24 (6.87)	14.18^{a} +7.50^{b}	60.12 + 31.80 = 91.92
5.	*Salix viminalis*	(8.36)	0.92 (1.50)	14.18^{a} + 7.50^{b}	13.05 + 6.90 = 19.95
	Total			61.71	973.17
	Average			0.62	9.73

a = Plantation, b = Harvesting, Figures in parentheses show percentage
(N=100)

Table 2: Manufacture of wicker handicrafts in the sample households.

Sl. No.	Type of wicker handicraft	Wicker species used	Quantity of wicker utilized (Kg)	Employment (Mandatys		Number of handicrafts produced/ annum	Sale price (`)	Income (`)
				Manday (s) require/ handi-craft	Size of employment (Mandays/ annum)			
1.	*Kangri* (Finished)	*Parrotia jacquemontiana/ Cotoneaster baciliaris*	1.0	0.5	7500	15000	50-500	2050000
2.	*Kangri* (Local)	*Indigofera pulchella.*	1.0	0.5	4250	8500	35-150	770000
3.	*Kangri* (Mixed)	*Parrotia jacquemontiana* and *Indigofera pulchella.*	1.0	0.5	3250	6500	35-200	743500
4.	*Kangri* for tourist (Finished)	*Salix triandra*	0.5	0.5	1250	2500	150	375000
5.	*Dakri* (Local)	*Indigofera pulchella*	3.0	0.5	1000	2000	150	300000
6.	*Dakri* (Local)	*Parrotia jacquemontiana*	4.0	0.5	1750	3500	250	875000
7.	*Dakri* (Finished)	*Salix triandra*	4.0	0.5	250	500	250	125000
8.	*Karngul* (Local)	*Parrotia jacquemontiana*	1.5	0.33	1000	3000	80	240000
9.	*Karngul* (Finished)	*Salix triandra*	1.5	0.5	75	150	100	15000
10.	Apple basket	*Parrotia jacquemontiana*	1.5	0.5	350	700	200	140000
11.	*Champa*	*Indigofera pulchella*	2.0	0.5	250	500	100	50000
12.	Laundry basket	*Salix triandra*	3.0	2.0	140	70	500	35000
13.	Multi-purpose basket	*Salix triandra*	3.5	2.0	110	55	500	27500
14.	Chairs (4) and table (1)	*Salix triandra*	10-12	6.0	72	12	2500	30000
15.	Kitchen basket	*Salix viminalis*	1.5	0.5	17.50	35	150	5250
16.	Pet baskets (3)	*Salix viminalis*	2.0	1.0	52	52	260	13520
17.	Basket for food items	*Salix viminalis*	2.0	1.0	11	11	250	2750
18.	Wicker cradle for children	*Salix. triandra*	8.0	4.0	32	08	2000	16000
19.	Flower baskets	*Salix viminalis*	0.5	0.33	31.33	94	50	4700
20.	Picnic basket	*Salix. triandra*	2.5	3.0	36	12	500	6000
21.	Bakers basket	*Salix viminalis*	3.0	2.0	110	55	600	33000
22.	Lunch basket	*Salix triandra*	3.5	2.0	30	15	500	7500
23.	Oval arm basket	*Salix viminalis*	2.5	1.0	145	145	250	36250
24.	Fancy basket	*Salix triandra*	2.5	3.0	18	06	650	3900
25.	Lamp shade	*Salix viminalis*	0.5-1.0	3.0	36	12	250	3000
26.	Tray	*Salix triandra*	2-2.5	1.0	25	25	600	15000
27.	Round basket (4 pieces)	*Salix triandra*	4.0	5.0	25	05	2000	10000
28.	*Sarpoosh*	*Salix viminalis*	2.0	5.0	20	04	200	800
29.	Duck basket	*Salix triandra*	1.5-2.0	3.0	18	06	125-650	3000
30.	Dustbins	*Salix viminalis*	2.5-3.5	2.0	84	42	50-500	16800
	Total				21937.83			5953470
	Average				219.38			59534.70

(` 1,40,000/ annum), *champa* (` 50,000/ annum), oval arm basket (` 36,250/ annum), laundry basket (` 35,000/ annum), bakers basket (` 33,000/ annum), chairs and table (` 30,000/ annum), multi-purpose basket (` 27,500/ annum), dustbins (` 16,800/ annum), wicker cradle for children (` 16,000/ annum), tray (` 15,000/ annum), pet baskets (` 13,520/ annum), round basket (` 10,000/ annum), lunch basket (` 7,500/ annum), picnic basket (` 6,000/ annum), kitchen basket (` 5,250/ annum), flower baskets (` 4,700/ annum), fancy basket (` 3,900/ annum), lamp shade (` 3,000/ annum), duck basket (` 3,000/ annum), basket for food items (` 2,750/ annum) and *sarpoosh* (` 800/ annum). The manufacture of *kangr*i generated highest unpaid employment opportunity of 16,250 mandays/ annum among the people in the study area followed by *dakri* (3000 mandays/ annum), *karngul* (1075 mandays/ annum), apple basket (350 mandays/ annum), *champa* (250 mandays/ annum), oval arm basket (145 mandays/ annum), laundry basket (140 mandays/ annum), multi-purpose basket (110 mandays/ annum), bakers basket (110 mandays/ annum), dustbins (84.00 mandays/ annum), chairs (4) and table (1) (72 mandays/ annum), pet baskets (3) (52 mandays/ annum), lamp shade (36.00 mandays/ annum), picnic basket (36.00

mandays/annum), wicker cradle for children (32.00 mandays/annum), flower baskets (31.33 mandays/ annum), lunch basket (30.00 mandays/annum), tray (25.00 mandays/ annum), round basket (25.00 mandays/ annum), *Sarpoosh* (20.00 mandays/annum), fancy basket (18.00 mandays/annum), duck basket (18.00 mandays/ annum), kitchen basket (17.50 mandays/annum), and basket for food items (11.00 mandays/annum). The wicker collection is being completed in three phases as: spring collection from April to May (*Sonth-e-kain*), summer collection from May to July (*Wahraat-kain*) and autumn collection from October to November (*Harud-e-kain*). The processing of the wickers collected was carried out from April to July and November to January which includes cutting of branches or twigs, grading of material for different handicraft designs, soaking in water for 10-24 hours, peeling off the bark, vertical stacking for drying and re-soaking in water for 2-3 hours before weaving. In case of willow plantation, the withies were collected during the winter season and processed subsequently. The manufacture of wicker handicrafts is carried out throughout the year while marketing is done during October to March.

The structure of household annual income consisted of all off-farm and on-farm sources viz., wicker handicraft, agriculture, labour, livestock, business, service and others in the sample households has been depicted in the fig. 2. It is evident from the Figure that the average annual income/ household obtained from wicker handicraft, agriculture, business, service, livestock, labour and others were computed to be ` 59534.70 (66.97%), ` 17886.00 (20.12%), ` 5670.00 (6.38%), ` 2240.00 (2.52%), ` 1564.00 (1.76%), ` 1404.00 (1.58%) and ` 6013.00 (0.68%) among surveyed households.

The positively significant correlation between education and the livelihood dependency on wicker handicraft is well articulated by the facts that the education results in bringing desirable changes in human behavior and helps the individual to move in right direction (Nugraha, 2012), the knowledge is built up through education, which makes the person aware of new innovations (Thamban *et al*., 2008; Sood *et al*., 2008) and the change in attitude is partly a function of education (Singha *et al*., 2006). The social participation of the rural people paves the way for sharing their views and experiences with other members of the organization (Nagesha and Gangadharappa, 2006; Nugraha, 2012), clarifying their doubts and getting opinion from different people and enriching their knowledge (Prakash and Sharma, 2008; Thamban *et al*., 2008). This is how the significant influence of this variable on the livelihood dependency on wicker handicraft can be explained. The positive and significant relationship of family composition with the livelihood dependency on wicker handicraft could be attributed to the fact that the handicraftsmen being an important member of their nuclear family might have taken up independent decision regarding any matter concerning to the livelihood generation for their family (Thamban *et al*., 2008; Ajake and Enang, 2012) and the larger sized families were having more labour force available for diversification to manufacture of wicker handicrafts (Sood *et al.,* 2008; Nugraha, 2012). The involvement of wicker handicraftsmen of different age groups in the cottage industry was more or less similar indicating that the variations in age has no influence on the livelihood dependency on wicker handicraft at all.

Contribution of Anardana: The study conducted on the role of Anardana *(Punica granatum)* in livelihood for the people of rural communities in Ramban district of Jammu and Kashmir reveals that the annual income from Anardana was highest in Kanga village ` 2,85,900/ ha with contribution to total household income 57.19% and found lowest in Ganote ` 1,76,500/ ha with contribution to total household income 41.11% (Table 3). A critical analysis of table-3 also reveals that Anardana has a fair share amounting to 48.78% in the net income of every household in the study area. Although the study is restricted only to the role of Anardana in the livelihood of people of Ramban, but it can be well inferred that it does has a role to play in the economy of the state. A random

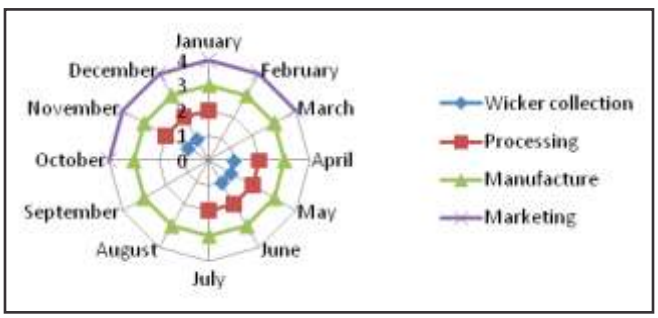

Fig. 1: Seasonality of wicker collection, processing, manufacture and marketing.

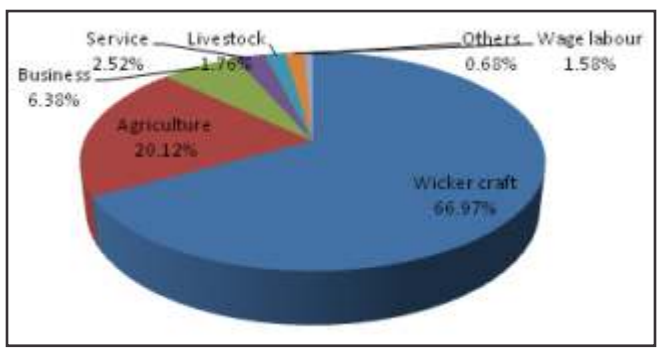

Fig. 2: Contribution of wicker handicraft to the total livelihoods.

survey of Ganote, Dharam, Gool, Farmoot, Sangaldan, Gundi, Maha kund, Chaderkot and, area revealed that each household in these areas collects 400-500 kg of dried seed, with per household annual collection of dry seeds touching about 550-625 kg in Kanga and Parmote villages of Ramban. Collection of ripe fruits usually starts during August and continues upto October. The fruits are usually hand plucked by bending the branches with the help of a long stick. The seeds, commonly known as 'anardana' are separated by hand and dried by spreading. After keeping some produce for self use – 'anardana' is used in the preparation of chutneys (with mint, green chillies, sugar) considered useful in relieving summer heat within the body and for stomach-ache and constipation – the remaining stock is sold. Good 'anardana' fetches a price ranging between ` 300 to ` 400 per kg at the village level, where the local commission agents working on behalf of traders at Jammu, Amritsar or Delhi procures it. Some produce from nearby areas is also brought to Ramban market where it is sold in open auction. It may be noted that in addition to fulfilling the bonafide domestic needs, each household engaged in collection of 'anardana' adds an average of ` 60,000 to its annual income. The rind also has good medicinal value and is used by India's herbal industry. However, its commercial potential is yet to be tapped because mainly of the difficulty in drying the rind. Its traditional uses, however, include preparing of ink for writing on *Takhti* by school children, in dying leather, for making FYM by mixing with cattle dung. Whereas the people want Daru populations to be further strengthened, a concern about the fruit borer that causes extensive damage to the seeds was expressed.

Contribution of Chilgoza pine: The study conducted on the role of *Pinus gerardiana* in livelihood of the people of Paddar valley of Kishtwar district of Jammu and Kashmir has been presented in table 4. A critical analysis of table 4 reveals that Chilgoza has a fair share amounting to 43.56 % in the net income of every household in the study area. Although the study is restricted only to the role of Chilgoza in the livelihood of people of Kishtwar, but it can be well inferred that it does has a role to play in the economy of the state.

Contribution of plant raw drug trade: The plant raw drug trade record in Jammu and Srinagar districts of the Jammu and Kashmir state reveals that volume of traded MAPs varied from site to site depending on availability of species. The estimated annual quantity along with cost per kg, part used and source of collection is also given. The highest trade was recorded for *Curcuma longa* (Haldi), *Punica granatum* (Anardana), followed by *Phyllanthus emblica* (Aonla) in Jammu district. But in Srinagar it was

Table 3: Comparison of Net Annual Income per household from Anandana (*Punica granatum*) with traditional crops and labour.

Village	Net income per household (in ` yr^{-1} ha^{-1})				Contribution of Anardana to total household income (%)
	Crop	Anardana	Labour	Total	
Ganote	157825	176500	95000	429325	41.11
Kanga	119000	285900	95000	499900	57.19
Dharam	159587	189250	94000	442837	42.74
Gool	140800	177862	90000	408662	43.52
Farmoot	112912	261275	94000	468187	55.81
Sangaldan	145612	261187	92000	498799	52.36
Gundi	137225	179437	92400	409062	43.87
Maha kund	114250	229650	92400	436300	52.64
Chaderkot	127225	199437	92400	419062	47.59
Parmote	119250	219650	92400	431300	50.93
Mean	133368	218014	92960	444343	48.78

Table 4: Comparison of net income per household from Chilgoza with traditional crops and labour.

Village	Net income per household in Rupees				Contribution of Chilgoza to total household income (%)
	Crop	Chilgoza	Labour	Total	
Atholi	12626	14120	9400	36186	39.02
Affani	5112	26072	9000	40184	64.88
Jar Karthai	12767	15140	9400	37037	40.58
Tayari	11264	14229	9000	34499	41.25
Thumb-ishtiyar	9033	12902	9400	31335	41.17
Lower-Shawas	11649	12895	9200	33744	38.21
Upper-Shawas	10978	13635	9240	33853	40.28
Ishtiyari	7314	10372	9240	26926	38.52
Mean	10092.88	14920.63	9240	34253.51	43.56

Table 5: Record of LOC trade of plant raw drug in J & K during 2015-16.

S.No	Botanical name	Local name	Part traded	Quantity traded
1	*Morchella esculenta*	Guchies	Fungus/Mycelium	4369
2	*Zizypus jujube*	Anab	Barry /Fruit	768
3	*Punica granatum*	Anarchilka	Fruit	6000
4	*Punica granatum*	Anardana	Dried fruit	8817
5	*Ficus carica*	Anjeer	Fruit	4114
6	*Aconitum heterophyllum*	Atees /Patees	Tuber /Root	15168
7	*Centaurea behan*	Bavan	Root	6015
8	*Viola odorata*	Banafsha	Flower	16663
9	*Podophyllum hexandrum*	Bankakri	Root	19070
10	*Trillium gavanianum*	Nag chatri	Root	7658
11	*Betula utilis*	Bhojpather	Bark	558
12	*Eclipta protrata*	Bringraj	Seed	16031
13	*Central islandica*	Charela Buch	Lichen	50
14	*Acorus calamus*	Bush	Roots /Rhizome	138200
15	*Phoenix dactylifera*	Dates	Fruit	2000

found that *Phoenix dactylifera.*(Dates), *Lawsonia inermis* (Henna) and *Rauolfia serpentina* (Sarpagandha) recorded highest values. Same results were recorded by Larsen and Olsen (2007). *Curcuma longa* finds use in antiseptic industry besides used as cooking ingredient, this the the reason that its trade has recorded highest in the region. *Punica granatum* and *Phyllanthus emblica* is found abundantly in the region particularly in outskirts of Jammu district. Both the species locally find numerous usages especially as chatini (blended aonla and anardana) rich in vitamin C and K. The highest trade of *Phoenix dactylifera* is related to Muslim majority in Srinagar where its consumption is considered sacred. The total quantity of NTFPs traded through LOC was also recorded by consulting Forest department officials and is presented in Table 5. The highest traded species was *Acorus calamus* (Buch), followed by *Trillium gavanianum* (Nagchatri) and *Podophyllum hexandrum* (Bankakri). The LoC trade between Jammu and Kashmir and other countries remained suspended for more than three decades mainly due to tension in the state, therefore effecting trade of medicinal and aromatic drug traders. In 2004, the trade ties between India and Pakistan improved creating opportunities for trade across the border. In 2015-16, the trade of medicinal and aromatic raw drugs through LoC reached highest crossing over 3 lakh kilograms. A total of 15 species were traded across the LoC through Uri sector of Baramulla, Srinagar and Pounch sector of Jammu region. Both these Border districts are now a days main cross points of LoC trade in Jammu and Kashmir. *Acorus calamus* being the highest traded species on the LoC is exported to Iraq, Iran and other Middle east countries because of its high demand for antioxidant and antibacterial use. Most of the drug dealers export this particular species to different pharmaceutical companies from Muzafarabad, PoK to middle east countries. *Phoenix dactylifera* is imported from these countries to Jammu and Kashmir for use in enhancing human vigor and vitality. Most of the trade of *Phoenix dactylifera* is done in the month of Ramazan, the holy month of Muslims. The use of plant medicinal raw drugs are used traditionally in both the regions in enormous quantities. The fields of usage are Ayurveda, Sidhi and Panchkarma. The latest technologies combined with traditional knowledge has given rise to new era of medical science. The trade of plant medicinal raw drugs has found good attention in the state and can create employment opportunities for people especially young generation. More research work should be done in this field to compile all the data related to trade of medicinal and aromatic plants in the state of Jammu and Kashmir.

जम्मू व कश्मीर में गैर प्रकाष्ठ वन उपज की सम्पदा एवं उनका व्यापार

एस.ए. गंगू, एम.ए. इस्लाम एवं ताहिर मुश्ताक

सारांश

वैश्विक रूप से गैर प्रकाष्ठ वन उपज/गैर काष्ठ वन उपज को "वन, अन्य वन भूमि एवं वनों के बाहर वृक्षों से व्युत्पन्न काष्ठ के अतिरिक्त जैविकीय मूल के सामानों को मिलाकर वन उत्पाद" के रूप में परिभाषित किया जाता है। जम्मू एवं कश्मीर के गैर प्रकाष्ठ वन उत्पादों को सामान्यत: ठेकेदारों को लीज के जरिए राज्य वन विभाग द्वारा एकत्रित किया जाता है। राज्य विशाल किस्म की विविध गैर प्रकाष्ठ वन उपज प्रजातियों को आश्रय देता है, जिन्हें इसके लोगों द्वारा स्व-उपयोग अथवा अपनी सालाना आय का कुछ भाग सृजित करने हेतु मामूली बिक्री के लिए एकत्र किया जाता है। गैर

प्रकाष्ठ वन उपज पर स्थानीय लोगों की निर्भरता जम्मू एवं कश्मीर के लोगों की स्थानीय अर्थव्यवस्था पर गैर प्रकाष्ठ वन उपज के महत्वपूर्ण प्रभाव को परिलक्षित करती है। भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद देहरादून द्वारा निधीयित गैर प्रकाष्ठ वन उपज पर नेटवर्किंग प्रोजेक्ट की उप परियोजना के तहत किए गए अध्ययनों में जम्मू एवं कश्मीर में विविध गैर प्रकाष्ठ वन उपज पर आजीविका निर्भरता के स्तर की जांच की गई। जिला पुलवामा में खपची हस्तशिल्प पर आजीविका निर्भरता का अध्ययन किया गया। जिला रामबान के लोगों की आजीविका में पूनिका ग्रेनेटम पर निर्भरता ने दर्शाया कि अनारदाना का अध्ययन क्षेत्र में प्रत्येक परिवार की कुल आय में 48.78 प्रतिशत तक का प्रमुख अशं है। जम्मू एवं कश्मीर के बाजारों में किए गए सर्वेक्षण ने दर्शाया कि दो अलग–अलग बाजारों में विभिन्न प्रजातियां बेजी जा रही हैं। यह व्यापार 2011 से 2015 तक अभिलिखित किया गया। सूक्ष्म, छोटे और मध्यम उद्यमों की स्थापना करने के लिए गैर प्रकाष्ठ वन उपज में स्थानीय संग्रहकर्ताओं को शामिल करने की अपार क्षमता है।

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