

# Involvement of Apatani women of Arunachal Pradesh in farm and home activities

### OYANG DANI\*, MINERVA SAIKIA BARUAH AND MANJU DUTTA DAS

Department of Extension and Communication Management, College of Home Science, Assam Agricultural University, JORHAT (ASSAM) INDIA

**Abstract :** The present investigation was undertaken to study the involvement of Apatani women of Arunachal Pradesh in farm and home activities with the objective to study the selected socio-personal characteristics of Apatani women of Arunachal Pradesh and to identify the extent of involvement of Apatani women in selected farm and home activities. The study was conducted in Lower Subansiri district of Arunachal Pradesh. Four villages were selected for the present study. Data were collected with the help of interview schedule. Statistical technique *viz.*, frequency, percentage, mean and standard deviation and coefficient correlation were used for analyzing the data. The study revealed that majority of the respondents were within the age group of 30-40, belonged to Hindu religion were mostly illiterate, married, having nuclear family and member of one organization. Observations revealed that all the respondents independently participated in sowing of seed, nursery raising, leveling of field, weeding, gap filing and application of organic manure. The findings revealed that correlation between extent of participation in farm activities and land holding was negative and significant. While relationship between extent of participation in home activities with family size was positive and significant. The mass media exposure and occupation of the family had positive and significant relationship with extent of participation in decision making pattern in home activities. The correlation between extent of participation in farm activities with family size was positive and significant.

KEY WORDS : Involvement, Apatani women, Farm, Home activities

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### INTRODUCTION

Arunachal Pradesh is the largest state in the North East region of India with a total geographical area of 83.743 sq.km and a total population of 13.84 lakhs (Census of India, 2011). It has a very rich biodiversity with undulating topography, extreme variations in altitude frin 150 m to 6,500 m and climatic conditions (Rao, 1994; Nayar, 1996; Myers *et al.*, 2000 and Yumnam, 2008). Although the tribal population in this zone in less than 12 per cent of the total tribal population of the country, it cibstutytes bulk of the population in this region

\* Author for correspondence

(Shankar *et al.*, 2009). The wide geographical, climatic and cultural diversity of Arunachal Pradesh provides a repository of wealthy traditional knowledge in the region (Singh *et al.*, 2009; Singh and Srivastava, 2009; Singh and Srivastava, 2010a and b). The majority of the mountainous population of Arunachal Pradesh (falling under Eastern Himalayan region) depends upon agricultural and forest based natural resources for their livelihood and these resources are sustained with traditional ecological knowledge (Ramakrishnan *et al.*, 2000) and 2006; Singh and Sureja, 2006 and Dolo *et al.*, 2009).

There are a few studies particularly on status of women

in Arunachal Pradesh. Mishra (1991) was concentrated on the traditional role of Nyishing women in their family and the community. Behera (1996) has emphasised on the culture of the Apatanis to bring out the picture of women's status. Ant (1997) has emphasised on the role and status of Nyishing women regarding their traditional work participation, educational status and employment pattern. In Pandey *et al.*, 1999, contained a number of similar studies which have focused on status of women of the major tribes in Arunachal Pradesh in terms of occupation, property rights and socio-cultural activities. Rao (2003) has analysed the various socio-economic dimensions of women belonging to five major tribes *viz.*, Apatanis, Adis, Nishis, Monpas and Mishmis.

The 'Apatani' is one of the major tribes. The agriculture system of Apatanis is unique of its own. Every inches of land is used for cultivation, even the agriculture plot bunds are used for millet cultivation and well known for taking care of their agriculture fields. After the transplantation of paddy they repeat three cycles of weeding to ensure a weed free field and healthy crop. Moreover, with a traditional system of maintaining cooperative effort under the overall supervision of the village headman, have optimized water use along with nutrient use in their rice fields. In areas where paddy fields remain under water for 3 to 8 months in a year, paddy-cumfish culture can provide an additional supply of fish. The culture of rearing fish in fields, which remain flooded even after the paddy is harvested which might also serve as an offshore occupation for farmers. The Apatani women are performing different activities in the agricultural field for day long hours of work during the seasons. Their wet rice cultivation and agriculture system are extensive even without the use of animal and machinery. Soil digging and dugging over, clods cutting, earth packing and smoothing are all done with iron, slightly curved bladed hoes. They are exclusively involved in agriculture operations such as seed sowing, weeding, transplanting. In addition to these activities in the agricultural field, Apatani women have to perform numerous household activities like food preparation, preparation of rice bear, fetching water, collecting fuel wood, child care etc. for maintaining their families. Apatani women gather wild plants as vegetables and maintain a kitchen garden to meet their need of vegetables required for household consumption, cleaning houses, washing clothes and utensils, looking after infants and children, and other jobs associated with the household at home, the internal family income is controlled by a woman. But the man also has his part of duty in looking after cultivation activities and acts as the head of family in society.

The Apatani women utilize varieties of domestic waste products to their paddy field to enhance crop productivity, which in turn enhances soil fertility as well as feed to fishes. They left heaps of rice bran, poultry dropping, pig excreta and many other household wastes during the month of December and January. Paddy fields are suitable for fish culture because of having strong bundhs in order to prevent leakage of water, to retain water up to the desired depth and also to prevent the escape of cultivated fishes during floods. The Apatani women are strongly involved in construction of bundhs to maintain the height due to geographical and topographic location of the paddy fields. Bamboo mattings are done at the base of the bundhs for their support. On the bundhs, millet cultivation is a common practice in Apatani plateau, leaving no portion of paddy plots unutilized. Keeping this in view it was decided to undertake the research work in the Lower Subansiri District of Arunachal Pradesh with the following objectives:

- -To study the selected socio-personal characteristics of Apatani women of Arunachal Pradesh.
- -To identify the extent of participation of Apatani women in selected farm and home activities.

### METHODOLOGY

The study was undertaken in the state of Arunachal Pradesh . Lower Subansiri district was selected purposively. From selected district, one block were selected purposively. From the selected block a list of villages where wet rice production is considered, four villages were selected considering the transport and communication facilities of the researchers. A total of 108 respondents were selected. The interview method was used to collect the data. The data were collected through personal interview method. After data collection, the gathered data were coded, tabulated and analyzed by the following statistical methods:

- Percentage
- Mean
- Standard deviation
- Co-efficient correlation.

### **OBSERVATION AND ASSESSMENT**

The experimental findings obtained from the present study have been discussed in following heads:

#### Socio-personal characteristic of the respondents:

Table 1 shows that 38.89 per cent respondents were of middle age group, majority of the respondents (79.63 %) were married, 58.33 per cent of the respondents belonged to Hindu religion, a large majority of respondents (82.41%) belonged to nuclear family, 50.92 per cent of the respondents belonged to medium family, 55.55 per cent respondents had katcha house, 45.37 per cent of respondents were illiterate, a large majority of the respondents (80.56%) were members of one organization, 55.55 per cent respondents belonged to farming category, majority of the respondents (65.74%) were of medium level of material possession. All the respondents (100 %) had no contact with extension personal and not participated any training programme, 53.70 per cent of the respondents had

	istribution of respondents according to		Fraguener	(n=108)
Sr. No.	Characteristics	Category	Frequency	Percentage
1.	Age	Younger age	28	25.92
		Middle age	42	38.89
		Older age	38	35.19
2.	Marital status	Married	4	3.7
		Widow	13	12.04
		Divorced	5	4.63
3.	Religion	Hindu	63	58.33
		Christian	45	41.67
4.	Education level	Illiterate	49	45.37
		Can read and write	12	11.11
		Primary	24	22.22
		Middle	15	13.89
		High School	5	4.63
		Higher Secondary	3	2.78
5.	Family type	Nuclear	89	82.41
		Joint	15	13.89
		Extended	4	3.7
6.	Family size	Small	15	13.89
		Medium	55	50.92
		Large	38	35.19
7.	Type of house	Katcha	60	55.55
		Semi-pucca	45	41.67
		Pucca	3	2.78
8.	Occupation of the family	Farming	60	55.55
		Business	13	12.04
		Non-agricutural	20	18.52
		Service	15	13.89
9.	Land holding	Marginal	97	89.89
		Small	11	10.19
10	Organizational membership	No membership	21	19.44
10	- <i>G</i>	Member of one organization	87	80.56
11.	Material possession	Low	17	15.74
	Possession	Medium	71	65.74
		High	20	18.52
12.	Socio-economic status	Low	31	28.70
	Socio-ccononne status	Low	65	60.19
		High	65 12	60.19 11.11

#### INVOLVEMENT OF APATANI WOMEN OF ARUNACHAL PRADESH FARM & HOME ACTIVITIES

Internat. J. Home. Sci. Extn. & Comm. Mgmt. | July, 2014 | Vol. 1 | Issue 2 | 51-56 HIND INSTITUTE OF SCIENCE AND TECHNOLOGY medium level of mass media exposure, 60.19 per cent of the respondents were from medium socio - economic status group, a large majority of the respondents (89.81%) had marginal land holding.

## Extent of participation of respondents in selected farm activities:

The data presented in Table 2 show that 100 per cent of

respondents independently participated in most of the farm activities such seed sowing, nursery raising, levelling of field, weeding, gap filing, application of organic manure and cleaning of seed. Similar findings were reported by Thejaswini *et al.* (2004); Premavathi and Seetharaman (2006) and Dhillon *et al.* (2007).

It is also evident from Table 2 that 62.04 per cent respondents jointly participated in seed collection from

Table 2: Dis	istribution of respondents according to their ex		(n=108)		
Sr. No.	Activities	Extent of participation (%)			
		Independent participation	Joint participation	No participation	
1.	Land selection	82.41	17.59	-	
2.	Seed selection	81.48	18.52	-	
3.	Land preparation	53.70	46.30		
4.	Seed sowing	100.00	-	-	
5.	Nursery raising	100.00	-	-	
6.	Bunding	89.81	10.19		
7.	Levelling of field	100.00	-	-	
8.	Land preparation for transplanting	81.48	18.52		
19.	Transplanting	68.52	31.48		
10.	Weeding	100.00	-	-	
11.	Water management	88.89	11.11		
12.	Gap filing	100.00	-	-	
13.	Application of fertilizer	27.78	4.63	67.59	
14.	Application of organic manure	100.00	-	-	
15.	Plant protection measure	90.74	9.26	-	
16.	Harvesting	54.63	45.37	-	
17.	Threshing	52.78	47.22	-	
18.	Winnowing	53.70	46.30	-	
19.	Seed collection from harvested crop	37.96	62.04	-	
20.	Cleaning of seed	100.00	-	-	
21.	Marketing	37.96	-	62.04	

Table 3 : Distribution of respondents according to their extent of participation in home activities (n=108)						
Sr. No.	Activities	Exte				
		Independent participation	Joint participation	No participation		
1.	Preparation of cooking	88.89	11.11			
2.	Serving of food	95.37	4.63	-		
3.	Washing vessels	88.89	11.11	-		
4.	Preparing food for animal	62.04	37.96	-		
5.	Feeding animal	70.37	29.63	-		
6.	Care of children	67.59	32.41	-		
7.	Care of elderly	90.74	9.26	-		
8.	Cleaning of house	100.00	-	-		
9.	Fetching water	95.37	4.63	-		
10.	Parboiling	100.00	-	-		
11.	Drying grain	71.30	28.70	-		
12.	Cleaning grain	100.00	-	-		
13.	Dehusking	100.00	-	-		
14.	Cleaning rice	100.00	-	-		
15.	Preparing local yeast	100.00	-	-		
16.	Preparing rice beer	100.00	-	-		
17.	Washing clothes and drying	83.33	16.67	-		

Internat. J. Home. Sci. Extn. & Comm. Mgmt. | July. 2014 | Vol. 1 | Issue 2 | 51-56 HIND INSTITUTE OF SCIENCE AND TECHNOLOGY harvested crop, 47.22 per cent in threshing,46.30 per cent in land preparation and winnowing, 45.37 per cent in harvesting, 31.48 per cent in transplanting, 18.52 per cent in land preparation for transplanting and seed selection, 17.59 per cent in land selection, 11.11 per cent in water management, 10.19 per cent in bunding, 9.26 per cent in plant protection measures to destroy the insects and only negligible (4.63%) of respondents participated in storage of grain and application of chemical fertilizer.

The findings presented in Table 2 indicate that 67.59 per cent of respondents not participated in application of fertilizer and 62.04 per cent of respondents also not participated in marketing.

It can be concluded from results of Table 2 that majority of the respondents did not follow the improved production technologies such as mechanization of farm. It may be due to lack of extension contact.

## Over all extent of participation of respondents in farm activities:

Fig. 1 shows that majority of the respondents (66.67%) had medium level of participation and 16.67 per cent of respondent had low and high level participation in farm activities.



Fig. 1: Distribution of respondents according to overall extent of participation in farm activities

## Extent of participation of respondents in selected home activities:

Table 3 reveals that 100 per cent respondents independently participated in parboiling, cleaning grain, dehusking, cleaning of rice, cleanin of house, preparing local yeast and preparing rice bear followed by 95.37 per cent in serving of food and fetching water, 90.74 per cent in care of elderly and in preparation of cooking and washing vessels 88.89 per cent, 83.33 per cent in washing cloth and drying 70.37 per cent in feeding animal, 71.30 per cent in drying grain, 67.59 per cent in care of children, 62.04 per cent in preparing food for the animal. It further shows that 37.96 per cent respondents jointly participated in preparing food for animal,

32.41 per cent in care of children, 29.63 per cent in feeding of animal, 28.70 per cent in drying of grain, 16.67 per cent in washing clothes and drying, 11.11 per cent in preparation of cooking and washing vessels. Similar findings were reported by Premavathi and Seetharaman (2006).

From the above it can be concluded that majority of the respondents performed most of their home activities independently. It might be due to the fact that as the socioeconomic status of the respondent is of medium level they have to perform most of the home activities independently. This is due to the engagement of other members in some occupation to meet the day to day expenses of the family.

## Over all extent of participation of respondents in home activities :

Fig. 2 shows that 75 per cent of respondents had medium level participation followed by 13.87 per cent and 11.11 per cent as had high and low level of participation, respectively.



Fig. 2: Distribution of respondents according to overall extent of participation in home activities

## Relationship of extent of participation of women in farm and home activities with selected independent:

Negative significant relationship was found between land holding and extent of participation of women in farm activities.

Positive significant relationship was found between family size and extent of participation of women in home activities and negative significant relationship was observed between age and extent of participation of women in home activities.

#### **Conclusion:**

Finding revealed that most of the Apatani women were of middle age group and education level was low. They were not participating training programme and were not keeping contact with extension agent even though extension agent is properly functioning in Arunachal Pradesh, Therefore, it is urgent to motivate the women to join in extension programme for better production and quality improvement. The findings of the study may provide enormous implication upon planner, policy maker, extension functionary and training implementing agency in planning, designing and implementing various plans and programmer for the benefit of the Apatani women.

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