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Agricultural Practices and Poverty Scenario in Kandi areas of Kashmir valley (India)

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ABSTRACT

Kandi refers to an area which is upland or sub montane having scarcity of water, undulating topography, erodible soils with terrain dissected by numerous gullies etc. The Kandi area of Kashmir valley is about 1646 Km^2 which constitute around 10.38 % of its total geographical area. The type of agricultural practices chosen by an individual in Kandi belts depend not only on the geographical location, but is a function of the culture, education, technology and income of the people. The present study conducted in these rain fed areas, was a primary survey based on structured questionnaire, aimed to find out the agricultural scenario of this area which included land use, land holding size, kind of agriculture practised, tools used for ploughing and yield. It was concluded that around 70% of the people with average land holding size of 7.27 kanals (which is far below than the average land holding size of J and K state) were involved in agriculture and allied activities, using traditional implements and agricultural practices end up with low yield, low income and subsequently falling in a vicious circle of poverty. Hence here is a need for a comprehensive and adequate policy formation to improvise the situation.

Key Words: Kandi, Undulating, Land Holding, Vicious Circle, Policy

I INTRODUCTION

Agriculture and the rural economy continue to be the primary source of income and employment for the majority of India's population. The great majorities of those who live in upland areas are poor and depend on agriculture for food and income. Agriculture contributes to poverty reduction because it provides employment to the poor, who have also generally low skills and education, as well as supporting the growth of non-agricultural employment in rural areas (Grewal et al., 2012). Due to undulating slope, low soil fertility, harsh climate, poor economy and use of traditional implements and farm practices the output or agricultural yield from the fields is low which enhances poverty in Kandi areas of Kashmir valley leading them to 'a vicious circle of poverty'. Agricultural practice which is broadly classified into subsistence and commercial farming is a process of farming in which farmer choose a particular type of farming practice. Most farmers relying on subsistence farming are marginal farmers with small land holdings using traditional farm techniques and implements which lead them to end up with low output, yield and subsequently with low income. The main reason behind rural poverty is believed to be low agricultural productivity because the people are mostly involved in primary activities. Agriculture and the rural economy continue to be the

primary source of income and employment for the majority of India's population. Pender and Hazell (2000) define less-favoured areas as areas limited in potential for agricultural production due to biophysical constraints such as low and uncertain rainfall, steep slopes, or poor soils or that face socio-economic constraints such as poor access to markets and infrastructure (or both). Smallholder farmers face several constraints including landlessness and small land holdings and declining agricultural productivity.The great majorities of those who live in rural areas are poor and depend on agriculture for food and income. Poverty exists in all the economies of the world and level of poverty vary from one place to another. Poverty is especially severe in rural areas where social services and infrastructure are limited or nonexistent. Agriculture contributes to poverty reduction because it provides employment to the poor, who have also generally low skills and education, as well as supporting the growth of non-agricultural employment in rural areas (Grewal et al., 2012). According to the International Fund for Agricultural Development (IFAD, 2010), poverty in developing countries is primarily rural: nearly 72% of those in poverty in these countries live in rural areas. The level of poverty in J & K is 21% which is better than the national average of 27% (Anonymous, 2011). De Janvry and Sadoulet (2010) found that growth in agriculture is nearly three times more effective in reducing poverty than is growth in manufacturing and nearly double that of growth in construction. The share of farm holdings of less than 2 hectares (ha) has increased from 70% in 1970–71 to 83% in 2005–06. Further, more than 60% of the farmers in the country are operating on less than 1 ha. Land distribution is highly skewed and uneven; the bottom 83% farmers control about 41% of farmed area. Thus, the changing structure of farm holdings in favour of smaller size poses a challenge for accelerated poverty reduction in rural areas and calls for land reforms. In the present study an attempt was made to know the relation between the agricultural practices and poverty in Kandi areas of Kashmir valley (Jammu and Kashmir). These areas comprise around 10% of the total geographical area of the valley (Fig. 1). Due to undulating slope, low soil fertility, harsh climate, poor economy and use of traditional implements and farm practice the output or agricultural yield from the fields is low which again enhances their poverty leading them to a vicious circle of poverty. Hence here is a need for a comprehensive and adequate policy formation to arrest the situation. The growth in agriculture has been a leading source of poverty reduction in most developing countries, especially in the case of extreme and rural poverty.

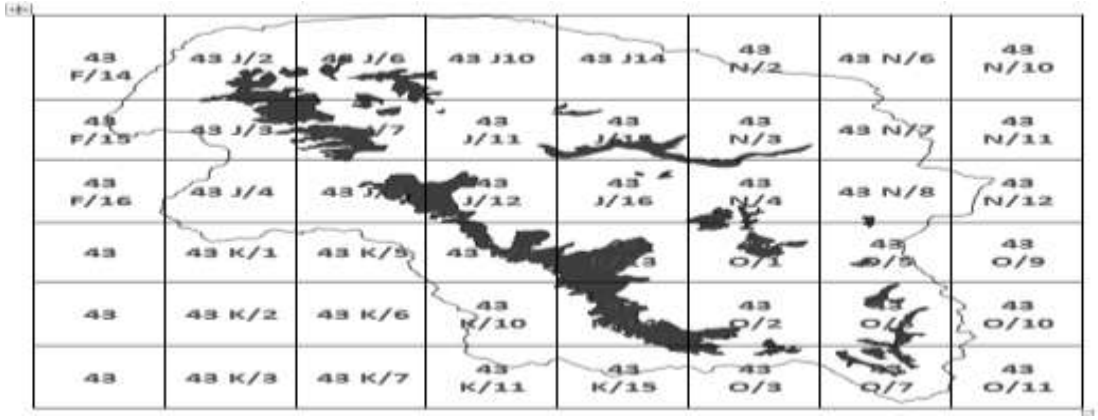

Figure 1: Representation of Kandi areas along with Toposheet numbers

II METHODOLOGY

- This research work covered the whole of the Kandi areas of Kashmir valley (Jammu and Kashmir).
- The data for this work were gathered from both the primary and secondary data. The bulk of data gotten for this research work was through primary data.
- One hundred two (102) villages were randomly chosen among eight districts of the Valley where Kandi area was found. On an average 20 households were interviewed in each of the selected villages and this total of 2040 questionnaires format.
- Simple percentage, tabulations, uses of figure, literal percentage, bar-graph and pie-charts are used.

III RESULTS

Operational land holding play a vital role in the family labourers employment as well as income generation. The main problem in the research area was small and fragmented land holding which results in management difficulties and ultimately less production.

Out of the total surveyed villages 70.41% have unirrigated land and 29.59% have irrigated land. The highest percentage of unirrigated land was found in Shopian (94.62%) and lowest in Ganderbal (52.97%) as depicted from Table 1. The irrigation facilities in Kandi areas of Ganderbal are somehow well developed with some network of artificial streams. The average land holding size in Kandi areas was 7.27 kanals being highest in Baramulla (8.84 kanals) and lowest in Anantnag (4.45 kanals) which is far below than the average of whole Jammu and Kashmir State (13.4 kanals as per 2013 - 14 Statistical Digest of the state – Anonymous , 2014)

Table 1: Land holding size and percentage of irrigated & unirrigated land

District	No. of sample villages	No. of sample households	Total land (in kanals)	Irrigated (in kanals)	Unirrigated (in kanals)	%age of irrigated land	%age of unirrigated land	Average land holding size (in kanals)
Anantnag	11	140	623	287	336	46.01	53.98	4.45
Baramulla	20	400	3535	928	2607	26.26	73.74	8.84
Budgam	12	240	2004	524	1480	26.16	73.84	8.35
Ganderbal	9	160	925	435	490	47.03	52.97	5.78
Kulgam	13	260	1447	506	941	34.99	65.01	5.56
Kupwara	22	440	3645	1204	2441	33.03	66.97	8.28
Pulwama	8	180	1466	200	1266	13.66	86.34	8.15
Shopian	7	220	1518	82	1436	5.38	94.62	6.9
Average	102	2040	14829	4388	10441	29.59	70.41	7.27

3.1 Kind of agriculture practised:

Agricultural practices practised in these areas were mainly grouped into three classes which are subsistence farming, commercial farming and other (like livestock rearing, own consumption and selling etc). Here subsistence farming signifies that people are self sufficient in crops and cereals, commercial farming signifies export of surplus (fruits, cereals or other products) produce. As can be depicted from Table 2 more than 50% of population was involved in subsistence farming being highest in Ganderbal (83.78%) and lowest in Shopian (28.47%).

Table 2: Percentage of people involved in agricultural practices

District	Subsistence farming (%)	Commercial farming (%)	Other (%)
Anantnag	68.86	28.57	2.57
Baramulla	42.55	51.25	6.2
Budgam	64.07	31.08	4.85
Ganderbal	83.78	10.91	5.31
Kulgam	49.08	47.16	3.76
Kupwara	71.43	25.4	3.17
Pulwama	37.78	58.04	4.18
Shopian	28.47	64.38	7.15
Average	55.75	39.60	4.65

3.2 Agricultural tools used for ploughing

The agricultural tools used by farmers in these areas are mainly categorised into three components which are hoe, plough and tractor. Most of these people use hoe & plough (76%) and small percentage of people (24%) use tractor for ploughing their fields. The cause may either be physical like steep slope where ploughing with tractor is not possible or it may be social like low income of people which does not allow them to plough their fields with sophisticated implements. The farmers with small land holdings are technically inefficient Chirwa (2002).

Table 3: Percentage of people using various tools of ploughing

District	Hoe (%)	Plough (%)	Tractor (%)
Anantnag	10.24	61.19	28.57
Baramulla	33.75	51.65	14.6
Budgam	24.42	62.74	12.84
Ganderbal	18.18	49.68	32.14
Kulgam	24.35	71.18	27.65
Kupwara	36.51	46.03	17.46

Pulwama	8.25	68.46	23.29
Shopian	17.24	47.36	35.4
Average	21.62	57.28	24

3.3 Cultivation of crops

Since these areas are having undulating topography, cultivation of crops is very difficult and yields are mostly low (as compared to average yield of state) as can be seen from the table below.

Table 4: Average yield of crops

		Yield (Kg/Kanal)			
	Rice	Oilseeds	Maize	Pulses	Others
Anantnag	90.4		10.71	2.25	32.66
Baramulla	94.67	33.33	10.57	4.67	15.19
Budgam	92.56	35.11	12.42	6.1	20
Ganderbal	106.11	42.35	9.66	3.11	57.5
Kulgam	95.58	36.64	15.65	6.32	20.14
Kupwara	96.50	40	21.68	8.74	40
Pulwama	98.23	45.2	14.25	7.14	54.4
Shopian	92.31	34.74	18.34	9.84	25
Average	95.80	38.35	15.04	6.02	33.11
[#]Kashmir Division	113.6	NA	65.55	28.73	NA
[#]J & K State	97.13	41.05	85.6	29.23	NA

[#]Source: Digest of Statistics 2013-14

IV CONCLUSION

The agricultural scenario of these areas reveal that out of the total surveyed villages 70.41% have unirrigated land and 29.59% have irrigated land; the average land holding size in Kandi areas was 7.27 kanals which is far below than the average of whole Jammu and Kashmir State (13.4 kanals as per 2013 - 14 Statistical Digest of the state); 76% of surveyed households use hoe and simple wooden plough to cultivate their lands and only 24% use tractor for ploughing purposes; people were mostly practising subsistence farming, commercial farming and some vegetation and tuber crops were also grown as other crops. Low crop yield could be attributed to the undulating topography, scarcity of water, steep and irregular slopes, low soil fertility and traditional farming tools and techniques adopted by farmers in these areas.

The various studies on determinants of poverty in developing countries which are dependent on agriculture find land as one of the important variable in explaining the welfare of the population. Access to land will lead to both increase in growth and reduction in poverty. For instance, the redistribution of land is likely to lead to derived demand for agricultural inputs such as fertilizers, modern tools or implements and improved seed varieties, and addressing the land issue may be critical in translating growth to poverty reduction. The disadvantage of limited land could be partially overcome through increasing the area under double cropping and by introducing a short-duration rabi crop in the valley, which has so far been growing only one crop a year.

REFERENCES

1. Grewal B., Grunfeld H. and Sheehan P. The contribution of agricultural growth to poverty reduction, ACIAR Impact Assessment Series Report No. 76, Australian Centre for International Agricultural Research: Canberra, 2012.

2. Pender, J., and P. Hazell., Promoting Sustainable Development in Less-Favoured Areas: Overview, Brief 1 in J. Pender and P. Hazell (eds.), Promoting Sustainable Development in Less-Favoured Areas. 2020 Vision Initiative, Policy Brief Series, Focus 4. Washington, DC: International Food Policy Research Institute, 2000.

3. IFAD (International Fund for Agricultural Development) Rural poverty report 2011: new realities, new challenges: new opportunities for tomorrow's generation, IFAD: Rome, 2010.

4. Anonymous, Jammu and Kashmir: The State Profile, PHD Research Bureau, PHD Chamber of Commerce and Industry, PHD House, 4/2 Siri Institutional Area, August Kranti Marg New Delhi, 2011.

5. De Janvry A. and Sadoulet E. Agricultural growth and poverty reduction: additional evidence, World *Bank Research Observer 25(1),2010, 1–20.*

6. Anonymous, Digest of Statistics 2013-14, Directorate of Economics and Statistics, Government of Jammu and Kashmir, 2014.

7. Chirwa, E. W. Sources of Technical Efficiency among Smallholder Maize Farmers in Southern Malawi, Work in Progress Report presented at the Biannual Research Workshop organised by the African Economic Research Consortium, Durban, South Africa, 2002.