

Comparative analysis of assets status of beneficiaries and non-beneficiaries of Pashu Bhagya scheme

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Abstract

Asset generation and its possession has direct relation to economic development of a person. Asset status is one of the prominent parameters to study the economic status of livestock rearing farmers. The study was conducted for systematic measurement and comparison of Pashu Bhagya Scheme beneficiaries and non-beneficiaries' asset status. Research was carried out by randomly selecting 90 beneficiaries and 30 non-beneficiaries of Pashu Bhagya Scheme from Vijayapura and Indi taluks. Nearly half (48.88%) of beneficiaries and 53.33 per cent of the non-beneficiaries had medium and low level of human assets, respectively. Over half (52.22%) of beneficiaries and 46.67 per cent non-beneficiaries had medium level of physical assets. Two-third (67.78%) of beneficiaries and half of the non-beneficiaries (50%) had medium level of natural assets. Nearly half (47.77%) of the beneficiaries had medium level of social assets whereas, among the non-beneficiaries, 46.67 per cent had low level of social assets. Sixty per cent of beneficiaries and half of the non-beneficiaries (50%) had medium level of financial assets. There was a significant difference in overall and component wise asset status of beneficiaries and non-beneficiaries. In the economic sense, the beneficiaries were able to set up their own animal unit, animal shed, machineries, land, house and re-invest in additional income generating activities or units. Providing education to their off-springs, participating in extension activities, building the connections or contacts with extension personnel, local leaders and progressive farmers were the changes brought socially.

Keywords: Assets, beneficiaries, non-beneficiaries, significance

1. Introduction

Asset refers to the resource with value that a respondent owns or controls with the expectation that it will provide for future benefit. Assets include: Human assets (education, health and employment generation) refers to the skills, knowledge and experience possessed by respondent viewed in terms of their value or cost to country or community used to measure the human capital of respondents. Physical assets (house, household and farm equipment) refer to acquisition like house, household articles, entertainment materials or farm equipment are used to measure the physical capital of respondents. Natural assets (land, vegetation and livestock) refer to stock of renewable and non-renewable natural resources that are useful to respondents is referred to natural capital, including land vegetation and livestock owned by the respondents. Social assets (social contact and social status) refer to the networks of relationships among people who live and work in a particular society, enabling that society to function freely. The social contact and status of the respondent is considered to measure social capital. Financial assets (financial sources and savings) refer to any economic resource measured in terms of money or the assets needed by the individual to provide goods or services as measured in terms of money value. This was measured

based on the access to financial sources and accumulation of financial capital in terms of savings.

Tanvir *et al.* (2007) ^[6] reported that the participatory forest management system introduced by the FSP (Forestry Sector Project) had a definite impact on increasing the natural and social assets of forest dwellers and reducing vulnerability to their livelihood. People's livelihood and access to assets may be affected by critical trends, shocks and seasonality, over which there is limited or no control. There are five capital assets which people can build up and/or draw upon *viz.* human, natural, financial, social and physical. Hahn *et al.* (2009) ^[2] adopted the Sustainable Livelihoods Approach considering five household assets namely, natural, social, financial, physical and human capital. The approach enhanced the ability of households to withstand shocks such as epidemics or civil conflict and climate change. Mutenje *et al.* (2010) ^[3] confirmed that livelihood strategies used by households and individuals in rural communities are shaped by human, natural, financial, social and physical resources that can be accessed. The ability to diversify livelihood depends on assets portfolios and the economic shocks that rural households face. According to Nesar *et al.* (2010) ^[4], the sustainable livelihood framework shows way for achieving sustainable livelihood through access to a range

of livelihood assets viz., natural, physical, financial, human and social which are combined in the pursuit of different livelihood context and strategies. From these reviews, it is concluded that the livelihood status of the people majorly depends on their asset viz., Human, Physical, Natural, Social and Financial status.

Pashu Bhagya Scheme was announced on 13th March, 2015 with a primary objective to set up animal units with a back-ended subsidy and help the livestock farmers to improve their livelihood status. Further, Pashu Bhagya Scheme can avail loan upto Rs.1.20 lakhs from commercial banks. This has made a prominent mark on the asset generation and possession. It brought the significant changes in the assets of beneficiaries from owning an animal unit, land and other resources, participating in social activities, easy accessibility to agricultural products and investment in additional enterprises/ units.

With this background the study was conceptualized with the following objectives

1. To assess and compare the asset status of beneficiaries and non-beneficiaries of Pashu Bhagya Scheme
2. To find out significant difference in the asset status of beneficiaries and non-beneficiaries

2. Methodology

Ex-post facto research design was used for the study. The study was carried in Vijayapura and Indi taluks of Vijayapura district in Karnataka state with total sample size of 120. Based on the highest number of beneficiaries and livestock population, three villages were selected from each selected taluk. fifteen beneficiaries and five non-beneficiaries were selected from each village randomly i.e., from each taluk 45 beneficiaries and 15 non-beneficiaries. Scale developed by Bharathkumar (2018) [1] with suitable modifications was administered for the study. Mean and Standard deviation were used to analyze the asset status of respondents and the significant difference between beneficiaries and non-beneficiaries’ asset status was measured using Chi-square test and Z-test.

3. Results and Discussion

The results of the study were as follows.

3.1 Human assets of respondents

Results in Table 1 depicts the ranking based on the mean score of human assets of beneficiaries. It is observed that maintaining harmony with neighbouring groups was recorded as first rank and Involvement of women in decision making (Rank II). Based on the mean score of human assets of non-beneficiaries, it is observed that maintaining harmony with neighboring groups was recorded as first rank and Encouraging women to participate in animal husbandry activities (Rank II).

Beneficiaries were able to meet the basic expenses required for education and health facilities when compared to non-beneficiaries. The reason might be the increased income due to the scheme. Other factors like education, motivation level, leadership quality of beneficiaries might have made them to use the facilities effectively. Further, cosmopolitaness due to scheme might have brought the awareness about education and health facilities. The non-beneficiaries’ women involved more in house chores and farming activities rather than decision making and education. It might be due to their low education level, old aged/ traditional thinking and financial situations.

3.2 Physical assets of respondents

Statements in Table 2 reveal the ranking based on the mean score of physical assets of beneficiaries as owning comfortable house (Rank I) and possess vehicles like bullock cart, tractor, two wheelers etc. (Rank II). Based on the mean score of physical assets of non-beneficiaries, it is observed that they own comfortable house (Rank I) and connect roads to villages and cities (Rank II).

Both beneficiaries and non-beneficiaries owned comfortable house, easy transport facilities towards cities and possessed the vehicles like bullock cart, two wheelers, tractors, pump sets. Beneficiaries were only provided with the facilities like animal units (except livestock equipment and machinery), training and animal insurance.

Table 1: Human Assets of respondents

Sl. No.	Statements	(n=120)			
		Beneficiaries (n ₁ =90)		Non-beneficiaries (n ₂ =30)	
		Mean	Rank	Mean	Rank
1.	Availability of health care facility and health insurance	02.00	VII	02.52	III
2.	Availability of educational facility	03.04	III	01.70	V
3.	Opportunity for developing leadership qualities	02.58	VI	01.33	VII
4.	Involving women in decision making	03.12	II	02.20	IV
5.	Encouraging women to participate in animal husbandry activities	01.90	VIII	02.96	II
6.	Motivating women to pursue education	02.72	IV	01.45	VI
7.	Training on Livestock and its activities	02.70	V	01.16	VIII
8.	Maintaining harmony with neighbouring groups	03.52	I	03.12	I

Table 2: Physical Assets of respondents

Sl. No.	Statements	(n=120)			
		Beneficiaries (n ₁ =90)		Non-beneficiaries (n ₂ =30)	
		Mean	Rank	Mean	Rank
1.	Owning a comfortable house	03.38	I	02.79	I
2.	Possession of improved livestock equipment and machinery	02.15	V	01.13	V
3.	Availability of transport facilities	02.89	III	02.49	III
4.	Access to connecting roads to the villages and cities	02.58	IV	02.50	II
5.	Possession of vehicle (bullock cart, tractors etc.)	03.26	II	02.32	IV

3.3 Natural assets of respondents

Table 3 depicts the ranking based on the mean score of natural assets of beneficiaries and non-beneficiaries. It is observed that access to animal products for domestic use is assigned first rank followed by access to livestock and animal products (Rank II) in beneficiary category. Whereas, among non-beneficiaries, it is observed that access to animal products for domestic use is assigned first rank followed by access to livestock and animal products (Rank II).

Both beneficiaries and non-beneficiaries had access to animal products for domestic use. Majority of the beneficiaries possessed landholdings and livestock units with timely trainings on scientific management of animals, which encouraged them to practice the scientific methods of animal rearing. Further, frequent visits to department and participation in various extension activities motivated them to use innovative ideas in agriculture that resulted in better livestock productivity.

Table 3: Natural Assets of respondents

(n=120)

Sl. No.	Statements	Beneficiaries (n ₁ =90)		Non-beneficiaries (n ₂ =30)	
		Mean	Rank	Mean	Rank
1.	Access to livestock and animal products	02.98	II	02.00	II
2.	Access to animal products for domestic use	03.22	I	02.20	I
3.	Land ownership enhances livelihood status	02.36	VI	01.78	IV
4.	Livestock ownership enhances livelihood status	02.87	III	01.90	III
5.	Assured facilities for increasing livestock productivity	02.62	V	01.21	VI
6.	Agriculture + livestock enhances livelihood status	02.75	IV	01.66	V

3.4 Social assets of respondents

Results in the Table 4 shows the ranking based on the mean score of beneficiaries' social assets. Credibility among the fellow villagers (Rank I) and extent of contacts with animal

and livestock development agency (Rank II). Based on the mean score of non-beneficiaries' Getting community support during crisis (Rank I) and credibility among the fellow villagers (Rank II) were recorded.

Table 4: Social Assets of respondents

(n=120)

Sl. No.	Statements	Beneficiaries (n ₁ =90)		Non-beneficiaries (n ₂ =30)	
		Mean	Rank	Mean	Rank
1.	Membership to various social institutions	02.69	IV	01.53	VI
2.	Holding position in socio-political organizations	02.41	VI	01.42	VII
3.	Participation in animal and farmers development programs	02.35	VII	01.54	V
4.	Credibility among the fellow villagers	02.98	I	01.95	II
5.	Getting community support during crisis	02.20	VIII	02.00	I
6.	Participation in outreach activities	02.74	III	01.68	IV
7.	Extending support to villagers during emergencies	02.60	V	01.74	III
8.	Extent of contact with animal and livestock development agency	02.86	II	01.10	VIII

The reason might be that many of the non-beneficiaries were not exposed to social activities due to their old age, traditional thinking, social status and low motivation level unlike young enthusiastic beneficiaries who had participated actively in many animal development programs and social activities.

3.5 Financial assets of respondents

In the Table 5, mean score of financial assets of beneficiaries were used for the ranking. Income from agriculture and livestock practices (Rank I), income from livestock and animal products (Rank II).

Table 5: Financial Assets of respondents

(n=120)

Sl. No.	Statements	Beneficiaries (n ₁ =90)		Non-beneficiaries (n ₂ =30)	
		Mean	Rank	Mean	Rank
1.	Investment in income generating activities	02.80	IV	02.18	IV
2.	Availability of credit facilities from formal institutions for livestock activities	02.47	VI	01.82	V
3.	Income from agriculture and livestock	03.16	I	02.42	II
4.	Income from livestock and animal products	03.10	II	02.51	I
5.	Possession of cash/jewellery	02.50	V	01.58	VII
6.	Practicing animal husbandry, apiculture etc., provides supplementary income	02.92	III	02.21	III
7.	Getting financial assistance from institutions during crisis	02.33	VII	01.75	VI

According to the mean score of financial assets of non-beneficiaries, Income from livestock and animal products (Rank I) and income from agriculture and livestock practices (Rank II) were recorded. Beneficiaries possessing land and livestock had better risk bearing ability. Further, frequent contact with extension

functionaries might have motivated them to take up other income generating activities like apiculture, sericulture, fisheries, poultry etc. and increase their financial situations. Further, that might have increased their reinvestment pattern too.

3.6 Assets status of respondents

Results in Table 6 and Figure 1 show that 47.78 per cent of beneficiaries had medium level of assets followed by low level (32.22%) and high (20.00%) level of assets. Whereas,

among non-beneficiaries 60.00 per cent had low level, 26.67 per cent had medium level and 13.33 per cent had high level assets. There is significant difference between the asset status of beneficiaries and non-beneficiaries (8.93*).

Table 6: Assets status of respondents

Characteristics	Level	Beneficiaries (n ₁ =90)		Non-beneficiaries (n ₂ =30)		Chi-square value
		f	%	f	%	
Assets	Low	29	32.22	18	60.00	8.93*
	Medium	43	47.78	08	26.67	
	High	18	20.00	04	13.33	

f-Frequency, % - Percentage, SD- Standard Deviation, * - Significant at 5%

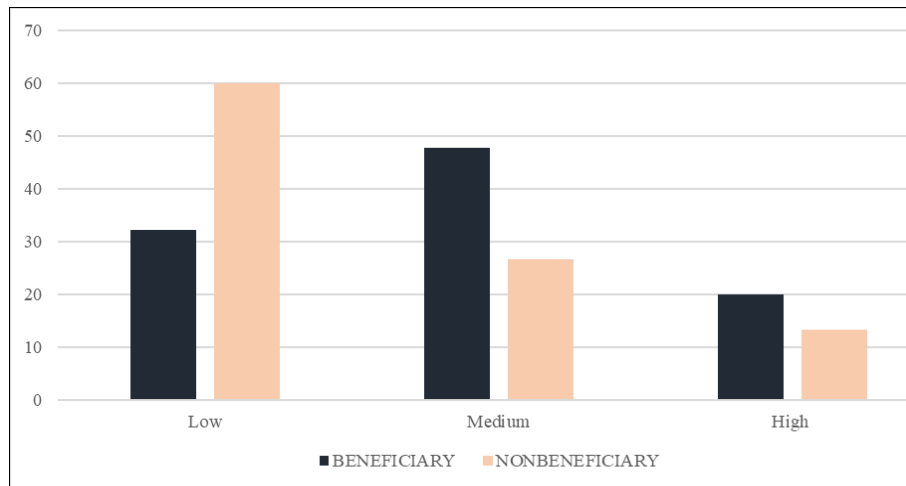


Fig 1: Assets status of respondents

3.7 Significance of component-wise Assets of respondents

From Table 7, it is known that there was also statistical difference in the means of two categories i.e., Human assets (1.69*), Physical assets (1.64*), Natural assets (1.78*),

Social assets (1.84*) and Financial assets (1.95*) by employing Z-test analysis. With this, it was also found that there was significant difference in overall Assets (1.74*) of the two categories.

Table 7: Significance of component-wise Assets of respondents

Sl. No	Category	Beneficiary (n ₁ =90)		Non Beneficiary (n ₂ =30)		'Z' value
		Mean	SD	Mean	SD	
	Assets	92.75	11.34	65.85	10.41	1.74*
i	Human assets	21.58	3.67	21.83	3.60	1.69*
ii	Physical assets	14.26	2.55	12.57	2.84	1.64*
iii	Natural assets	16.80	2.81	14.47	1.91	1.78*
iv	Social assets	20.38	3.67	17.90	3.35	1.84*
v	Financial assets	19.28	2.75	15.80	2.03	1.95*

SD- Standard Deviation, * - Significant at 5%

There is a greater difference in the asset status of the beneficiaries and non-beneficiaries. With the effective use of the facilities of education, health, training, access to natural resources, involvement of family members and extension contact along with participation in extension activities made the beneficiaries to improve their physical, social and financial assets.

3.8 Categorization of respondents based on components of Assets

From Table 8 it is evident that 48.88 per cent of

beneficiaries had medium level of human assets, and among the non-beneficiaries, 53.33 per cent had low level of human assets. Over half (52.22%) of the beneficiaries and 46.67 per cent of non-beneficiaries had medium level of physical assets. Two- third (67.78%) of the beneficiaries and half of non-beneficiaries (50%) had medium level of natural assets. Nearly half (47.77%) of beneficiaries had medium level of social assets whereas, the, 46.67 per cent of non-beneficiaries had low level. Sixty per cent of beneficiaries and half of non-beneficiaries (50%) had medium level of financial assets.

Table 8: Categorization of respondents based on components of Assets

(n=120)

Characteristics	Level	Beneficiaries (n ₁ =90)		Non-beneficiaries (n ₂ =30)		Chi-Square Value
		f	%	f	%	
Human Assets	Low	27	30.00	16	53.33	8.54*
	Medium	44	48.88	11	36.67	
	High	19	21.11	03	10.00	
Physical Assets	Low	28	31.11	12	40.00	9.03*
	Medium	47	52.22	14	46.67	
	High	15	16.67	04	13.33	
Natural Assets	Low	18	20.00	13	43.33	5.99*
	Medium	61	67.78	15	50.00	
	High	11	12.22	02	06.67	
Social Assets	Low	28	31.11	14	46.67	8.12*
	Medium	43	47.77	11	36.66	
	High	19	21.11	05	16.67	
Financial Assets	Low	20	22.22	11	36.67	9.19*
	Medium	54	60.00	15	50.00	
	High	16	17.78	04	13.33	

f-Frequency, % - Percentage, SD- Standard Deviation, * - Significant at 5%

There is significant difference between the human asset (8.54*), physical asset (9.03*), natural asset (5.99*), social asset (8.12*) and financial asset (9.19*) status of beneficiaries and non-beneficiaries at 5 per cent level of significance.

With better use of education, health and training facilities, more involvement in outreach and other development activities beneficiaries were able to raise their human asset status. Objectives of the scheme was to enhance productivity and creating employment opportunities through livestock production. Hence, increased income and employment opportunities provided better physical capital among beneficiaries. Possession of landholdings, herds and access to the facilities to improve livestock productivity made majority of beneficiaries to have medium level of natural assets than non-beneficiaries. Increased extension contacts and participation paved the way to progress in the economic as well as social aspects of beneficiaries. Active involvement of beneficiaries in development programs, demonstrations, trainings, village meetings, field and home visits, mass media usage made their social capital better when compared to non-beneficiaries. Investment in subsidiary activities like backyard poultry, apiculture, sericulture, kitchen gardens along with the increased income

from agriculture, livestock and animal products built the confidence of beneficiaries in getting financial assistance from institutions to sustain their financial capital. These all factors affected the livelihood status of respondents (Table 9).

Table 9: Association of components of Assets with Livelihood Status of respondents

(n=120)

Assets	Livelihood Status	
	Beneficiaries (n ₁ =90)	Non-beneficiaries (n ₂ =30)
Human assets	10.52*	8.92 ^{NS}
Physical assets	13.19*	10.33*
Natural assets	11.13*	9.51*
Social assets	12.64*	9.03 ^{NS}
Financial assets	14.71**	11.45*

* - Significant at 5%; ** - Significant at 1%; NS- Non-significant

Whereas, non-beneficiaries lagged in terms of providing education, updating and using scientific technologies, participation in extension activities and managing the credit and animals efficiently. Hence, beneficiaries had better asset status than non-beneficiaries.

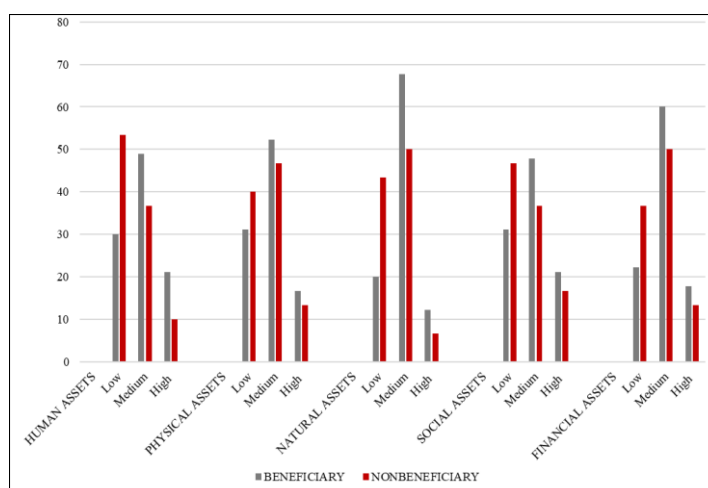


Fig 2: Category of respondents based on components of Assets

4. Conclusion

Asset status decides the socio-economic reputation or growth of the person. In this study, it was found that the Pashu Bhagya Scheme brought the significant improvement in the socio-economic status of the beneficiaries. In the economic sense, the beneficiaries were able to set up their own animal unit, animal shed, machineries, land, house and re-invest in additional income generating activities or units. Providing education to their off-springs, participating in extension activities, building the connections or contacts with extension personnel, local leaders and progressive farmers were the changes brought socially. The study compared the beneficiaries and non-beneficiaries' asset status and found that beneficiaries have better status than non-beneficiaries. Hence, there is need to bring improvement in overall assets status of the both non-beneficiaries and beneficiaries in general, non-beneficiaries in particular. Extension personnel must take responsibility in disseminating information about the similar schemes and try to involve non-beneficiaries in several extension activities like group discussion, exhibitions, public talks, campaigns and others.

5. Authors Contribution

Conceptualization and designing of the research work, Data collection, Analysis of data and interpretation, Preparation of manuscript (Sampraja Bandi); Conceptualization, Data curation and Draft correction (R. Vinay Kumar); Supervision and Conceptualization (O. R. Nataraju); Conceptualization, Data analysis and Data curation (Mohan Kumar, T.L)

6. Conflict of Interest

"The authors declare no potential conflicts of interest with respect to research, authorship and/or publication of this articles".

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