



RESEARCH PAPER

A study on livelihood security of rehabilitant farmers

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Abstract : This research analyzed the livelihood security of the rehabilitant farmers of Upper Krishna Project Area (UKP). The present investigation was undertaken in Upper Krishna Project (UKP) area of Bagalkot district, Karnataka state. Livelihood Security of the rehabilitant farmers was analyzed by considering five components *viz.*, natural, physical, financial, human and social capital. All the rehabilitant farmers covering 176 villages and 136 rehabilitation centres spread over in Bagalkot, Bijapur, Belgaum, Gulbarga and Raichur districts under UKP form the population for the study. The present study depicted that Livelihood Security of the rehabilitant farmers was found to be 54.66 per cent. Natural capital of the rehabilitant farmers was found to be the lowest among all the capitals. Social capital performed moderately among the components of the livelihood security. Rehabilitant farmers residing closer, moderately and far away from the District Head Quarter (DHQ) also analyzed. Further study revealed that relatively higher Livelihood Security of 58.58 per cent was observed among the closely distanced rehabilitant farmers from the DHQ. Most of the rehabilitant farmers (35.00%) residing closer to DHQ belonged to high Livelihood Security category.

Key Words : Rehabilitant farmers, UKP, Livelihood security, Livelihood capitals, DHQ

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INTRODUCTION

India is one of the developing countries, where a majority of people depend on agriculture for their livelihood. Situation in North Karnataka is no way different from this. The rainfall in North Karnataka is confined to monsoon season and is unevenly distributed. As a result, these areas are affected by droughts. Hence, it was considered necessary to provide large scale irrigation facilities to these areas by harnessing the water potential of the rivers, which harnesses the overflowing supply of water during the monsoon and utilize for irrigation. Therefore, Upper Krishna Project (UKP) was

started as a multipurpose irrigation project in the drought prone northern parts of Karnataka across the river Krishna covering Bagalkot, Bijapur, Belgaum, Gulbarga and Raichur districts.

The Upper Krishna Project (UKP) is one of the biggest projects in India. The UKP consists of two dams across the river. The upper dam is located at Alamatti village, of Karnataka state which has hill range to provide the ideal site for bulk storage of water (*i.e.* Storage cum distributor dam) and the lower dam serves mainly as a diversion/ distribution dam which is located at Narayanpur village. The whole UKP was taken up in two stages. Stage-I has 3 phases. In the 1st phase, construction of

Narayanpur dam and beginning of Almatti dam were covered. It displaced 11,745 families (58,720 persons) by covering 41 villages as they are submerged in the back water of Narayanpur dam. In the IInd phase, construction of Almatti dam upto 512 meters and In the IIIrd phase, construction of Almatti dam upto 519.6 meters, which displaced 82,298 families (2,92,160 persons) of 135 villages as they are submerged in backwater of Almatti dam. Totally Narayanpura and Almatti dams together displaced 176 villages involving 94,043 families of 3,50,880 people.

Uday Kumara and Shrestha (2011) in their study on assessing livelihood for improvement in Sri Lanka, they considered five livelihood assets (human, natural, financial, physical and social) as suggested in the framework. Further, each asset was represented by two to three selected indices, each of which was based on a number of individual decision variables ranging from one to four. Livelihood index was computed as five capital assets namely human, natural, financial, physical and social assets. Each of which was divided into sub-indices for each asset class using factor analysis, while decision variables were directly used in multiple regression and optimization procedures, as these are important in policy interventions.

In the present study, Livelihood Security refers to the secure ownership of or access to resources and income generating activities including assets to meet basic needs. These basic needs include adequate health facilities, shelter, level of income, basic education and community participation in social activities. If any of these basic needs is not met, those households become insecure. Therefore, there is a need to analyze the Livelihood Security of rehabilitant farmers of UKP (Upper Krishna Project) area.

MATERIAL AND METHODS

The present investigation was undertaken in Upper Krishna Project (UKP) area of Bagalkot district, Karnataka state. All the rehabilitant farmers covering 176 villages and 136 Rehabilitation centres spread over in Bagalkot, Bijapur, Belgaum, Gulbarga and Raichur districts under Upper Krishna Project (UKP) form the population for the study. Among the districts Bagalkot district was purposively selected as it has more number of rehabilitant farmers and Rehabilitation Centres (RCs). Rehabilitant farmers residing closer, moderately and far

away from the District Head Quarter (DHQ) have possessed different type of infrastructure facilities, exposure and accessibility for the various developmental interventions. It is necessary to know, how, Livelihood Security of the rehabilitant farmers varies with the distance. Therefore, in Bagalkot district, three Rehabilitation Centres (RC) were selected from each of Bagalkot, Biligi and Hungund taluk based on the distance from the District Head Quarter *i.e.* closer (0 to 10 kms), moderately (10 to 40 kms) and far away (> 40 kms) respectively. Further, from each Rehabilitation Centre 20 farmers who possessed minimum one acre of land were selected to form a sample of 180 by using random sampling technique. Before analysis of livelihood security, Researcher was developed a scale with the help of judges rating and by using developed scale, Livelihood security of the rehabilitant farmers was analyzed. The livelihood security was calculated by using following formula.

$$\text{Livelihood security index} = \frac{\text{Score related to natural capital} + \text{physical capital} + \text{financial capital} + \text{human capital} + \text{social capital}}{\text{Maximum possible score for livelihood security}} \times 100$$

RESULTS AND DISCUSSION

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Livelihood Security of the rehabilitant farmers:

In the present study Livelihood Security of the rehabilitant farmers was analyzed by considering five components *viz.*, natural, physical, financial, human and social capital and is presented under following headings.

Natural capital of the rehabilitant farmers :

The data in Table 1 indicated that natural capital of the rehabilitant farmers was found to be low (48.77%). The natural capital is enhanced or augmented when it is brought under human control to increase productivity, income generation and proper livelihood option. But, rehabilitant farmers in the UKP area possessed smaller land holdings, poor irrigation sources, poor vegetation cover and also practiced farming systems with less number of enterprises *viz.*, crop + dairy and crop + goat rearing. It was found during the survey that during rehabilitation process, farmers were given choice to buy

the land in new area after getting the compensation for the land they lost. Most of the farmers acquired less land than they possessed earlier. Hence, the natural capital namely land, water, vegetation and livestock resources were found to be low. The above findings are in line with the results of Geetha (2007), who conducted a study on impact of Bharatiya Agro-industries Foundation (BAIF) programmes on livelihoods of women beneficiaries in north Karnataka and found that the overall capital creation index was 64.10% in which the contribution of natural capital was less.

Relatively higher natural capital (53.62%) was found with the rehabilitant farmers residing closer to the District Head Quarter (DHQ) followed by moderately away (47.63%) and far away (45.05%). The rehabilitant farmers located closer to the DHQ had deep black soil and relatively lower slope of the land than rehabilitant farmers located moderately and far away from the DHQ. Further, rehabilitant farmers located closer to DHQ had good irrigation infrastructure by means of canal and bore wells which led to high accessibility of irrigation and other benefits. Though it was choice of the farmers to select the Rehabilitant Centres (RC), Government should make strategy to maintain equality among the rehabilitant farmers to ensure equality in accumulating and developing natural resources.

A closer look at the table revealed that except source of irrigation (53.51%) and vegetation (36.98%) rehabilitant farmers residing closer to DHQ scored high on livestock composition, land resources and farming system over the farmers residing moderately away and far away from the DHQ. Among the subcomponents of natural capital, livestock composition (61.69%) scored medium among the farmers and scored better (70.23%) among the rehabilitant farmers residing closer to the DHQ followed by moderately away (59.26%) and far way (55.56%). The above data clearly indicated that,

dairying is being practiced by most of the rehabilitant farmers. However, it was intensively practiced by rehabilitant farmers located closer to the DHQ than the other two categories. Due to availability of higher irrigation facilities that provides opportunity to raise fodder crops and also shorter distance from the DHQ provides transport and price benefits.

All the rehabilitant farmers were cultivating commercial crops like maize, sugar cane and onion instead of cereals, pulses and oil seeds and also practicing mono cropping like sugar cane instead of intercropping. Hence, they scored low on farming system. However, farming system scored high among the rehabilitant farmers residing closer to DHQ than the far away and moderately distanced rehabilitant farmers. Along with the crop cultivation closer distanced rehabilitant farmers were practicing Crop + dairy farming, crop + dairy + sheep/goat farming *etc.*

The Upper Krishna Project (UKP) was conceived by the Government of Karnataka across the Krishna River to provide irrigation to the drought prone areas of Bijapur, Bagalkot, Gulbarga, Raichur and Koppal district. Therefore, Government of Karnataka constructed irrigation infrastructure like canals in all most all the rehabilitant farmers' area. But, moderately distanced rehabilitant farmers were found to have relatively high irrigation source (56.86%) as compared to closer (53.51%) and far away (50.33%) distanced farmers. Existence of higher number of other irrigation sources like bore wells and open wells at moderately distanced rehabilitant farmers as compared to closer and far away distanced rehabilitant farmers was also one of the reasons.

Physical capital of the rehabilitant farmers :

It is interesting to note from the Table 2 that physical capital of the rehabilitant farmers was found to be high

Sr. No.	Sub-components	Distance of rehabilitant farmers from the District Head Quarters (DHQ)			Overall (n=180)
		Far-away (n ₁ =60)	Moderately (n ₂ =60)	Closer (n ₃ =60)	
1.	Land resource	42.82	50.73	56.03	49.86
2.	Source of irrigation	50.33	56.86	53.51	53.57
3.	Farming system	44.98	41.02	49.16	45.05
4.	Vegetation	33.48	41.46	36.98	37.31
5.	Livestock composition	55.56	59.26	70.23	61.69
	Natural capital	45.05	47.63	53.62	48.77

Note: (A) Far away: >40 km, moderately away: 10 to 40 km and closer: 0 to 10 km

(B) Values in table indicate the percentage

(72.05%). Almost all the rehabilitant farmers had constructed concrete houses under the House Construction Grants (HCG) and electricity was also provided by the Government. However, all the Rehabilitation Centres (RC) are well connected with the roads which led to better means of transport. Further, due to the huge compensation money received by the rehabilitant farmers, they were able to purchase more household materials. Therefore, rehabilitant farmers scored high on type of house and household facilities, which might have led to higher physical capital of the rehabilitant farmers. The above findings are in line with the results of Claude and Davis (2003), who conducted research on poverty and changing livelihoods of migrant maasai pastoralists in Morogoro and Kilosa districts, Tanzania and an increased physical assets acquisition by Maasai patoralists in the study area indicated that moving to these new places had improved their purchasing power. The material assets that they have identified and acquired include houses, farms, farm implements and cattle.

Further analysis of data revealed that among the rehabilitant farmers, relatively higher physical capital (75.02%) was observed with the closely distanced rehabilitant farmers followed by moderately away (72.24%) and far away (68.89%). The rehabilitant farmers residing closer to the DHQ had well connected road with shorter distance from the city, which led to higher accessibility of market facilities and extension

contact for required information than the rehabilitant farmers residing moderately away and far away from the DHQ.

A close look at the table indicated that except means of transport (72.59%), rehabilitant farmers residing closer to DHQ scored high on household facilities and type of house over the rehabilitant farmers residing moderately away and far away from the DHQ. Rehabilitant farmers residing closer to DHQ hired tractors and bullock cart for transportation of the agriculture goods due to the inadequate family labour.

All the rehabilitant farmers availed cent per cent benefit of house construction grants (HCG) (*i.e.* Free electricity facilities and house construction) because, house and electricity facilities were provided by the R and R project under the House Construction Grants (HCG). However, rehabilitant farmers residing closer to DHQ possessed comparatively higher number of houses due to the high accessibility and shorter distance of R and R office.

Financial capital of the rehabilitant farmers :

A perusal of Table 3 indicated that financial capital of the rehabilitant farmers was found to be high (68.28%). During the survey it was learnt that, rehabilitant farmers invested the compensation money in the form of gold, LIC and purchase of new land. However, rehabilitant farmers availed benefit of free electricity for their houses, became members of new

Table 2 : Physical capital of the rehabilitant farmers (n=180)

Sr. No.	Sub-components	Distance of rehabilitant farmers from the District Head Quarters (DHQ)			Overall (n=180)
		Far-away (n ₁ =60)	Moderately (n ₂ =60)	Closer (n ₃ =60)	
1.	Means of transport	60.90	78.12	72.59	70.54
2.	House type	83.47	83.52	86.11	84.37
3.	Household facilities	76.74	83.07	87.87	82.56
4.	Farm implements and machinery	60.30	57.83	60.70	59.61
	Physical capital	68.89	72.24	75.02	72.05

Table 3: Financial capital of the rehabilitant farmers (n=180)

Sr. No.	Sub-components	Distance of rehabilitant farmers from the District Head Quarters (DHQ)			Overall (n=180)
		Far-away (n ₁ =60)	Moderately (n ₂ =60)	Closer (n ₃ =60)	
1.	Annual income	70.08	75.99	83.33	76.47
2.	Annual expenditure	67.39	68.51	73.87	69.92
3.	Loan/credit	74.21	78.87	81.44	78.18
4.	Repayment	57.88	62.16	64.62	61.55
5.	Savings	52.12	50.07	60.67	54.29
	Financial capital	64.54	67.65	72.65	68.28

SHG and saved good amount (on an average of six thousand per member). Therefore, rehabilitant farmers scored high on financial capital.

Among the rehabilitant farmers, higher financial capital (72.65%) was found with the closely distanced rehabilitant farmers from the DHQ followed by moderately away (67.65%) and far away (64.54%). All the rehabilitant farmers possessed high annual income. However, rehabilitant farmers residing closer to the DHQ possessed comparatively high annual income from both agriculture and allied activities like dairy, sheep rearing *etc.* They were able to sell the milk and other commodities at the district place at higher price. The cost of transportation and marketing was also low.

It can also be observed from the table that rehabilitant farmers residing closer to DHQ scored high over moderately away and far away distanced rehabilitant farmers on all the sub-component of the financial capital. This is due to the fact that, closely distanced rehabilitant farmers had taken lesser loan from the nationalized and co-operative bank, due to the high annual income and more non-agriculture job opportunity. But, rehabilitant farmers residing moderately and far away from the DHQ had taken loan from both nationalized banks and co-operative society as crop loan, crop insurance *etc.* However, expenditure closer to district place is usually high as compared to far away area of the district. The rehabilitant farmers residing closer to city invested money in luxury materials like, motor cycle, refrigerator, Dish T.V, fan, washing machine, *etc.*, than the other two categories.

Human capital of the rehabilitant farmers :

Table 4 revealed that human capital of the rehabilitant farmers was found to be 63.59 per cent. Rehabilitation and Resettlement (R and R) project, Government of Karnataka has established primary health centre in every Rehabilitation Centre (RC). All the Rehabilitation Centres are well connected with tar road,

no major health problem was found during the survey and every month the NGO's are conducting various training programmes for rehabilitant farmers under the Income Generating Schemes (IGS). Therefore, overall human capital of the rehabilitant farmers was found to be better.

Among the rehabilitant farmers, relatively higher human capital (67.63%) was found with closely distanced rehabilitant farmers from the DHQ followed by moderately away (64.03%) and far away (59.12%). Rehabilitant farmers residing closer to DHQ had high accessibility to the health centres like primary health centre, private clinic, traditional medical centre *etc.* They also possessed additional facilities like training exposure with up gradation of skills under different schemes. Education of the family head residing closer to the DHQ was higher due to the more exposure.

A closer look at the table indicated that rehabilitant farmers residing closer to DHQ scored high over moderately away and far away distanced rehabilitant farmers on all the sub-components of the human capital. During survey rehabilitant farmers expressed that, most of the time primary health centres in the far away distanced places were closed as the Rehabilitation Centres (RC) were interior. Hence, there was a problem of irregularity in attendance of the doctors. Similar findings were obtained by Lamichhane (2010) who showed that 48.30 per cent of household, where at least one member was so sick in the past month that they missed work/school and couldn't receive service from local Health post because it was all time closed due to the absence of health assistances and far away from the city.

Further analysis of the data revealed that training exposure was found to be low (47.91%) among the rehabilitant farmers. However, it was very low among the far away rehabilitant farmers as compared to other two categories. R and R project made a provision of Income Generating Schemes (IGS) for the rehabilitant

Sr. No.	Sub-components	Distance of rehabilitant farmers from the District Head Quarters (DHQ)			Overall (n=180)
		Far-away (n ₁ =60)	Moderately (n ₂ =60)	Closer (n ₃ =60)	
1.	Health facilities	69.02	75.93	78.78	74.58
2.	Education of the family head	54.08	54.55	67.29	58.64
3.	Trainings exposure	43.44	49.54	50.74	47.91
4.	Awareness	63.37	64.85	66.72	64.98
	Human capital	59.12	64.03	67.63	63.59

farmers for the self employment and implemented through various NGO's. These NGO's conduct training programmes on various subjects like tailoring, nursery management, motor rewinding, dairy management, crop improvement *etc.* Due to the interior placement and poor follow up of NGOs and other institutions, far away farmers could not evince interest in training programmes.

Social capital of the rehabilitant farmers :

A critical analysis of the data in Table 5 revealed that social capital of the rehabilitant farmers was found to be 55.24 per cent. Rehabilitant farmers when shifted to Rehabilitation Centre (RC) their earlier contacts were disturbed. They had attachment with their earlier place and they were struggling to adjust with the new area. However, majority of the farmers who lost their land become wage labours which led to low occupation status. Hence, all these factors might have contributed for medium social capital of the rehabilitant farmers and also there was no significant difference in the social capital of the rehabilitant farmers residing in different locations.

Among the rehabilitant farmers, relatively higher social capital (56.61%) was observed with farmers who are moderately away from the DHQ followed by closely (55.68%) and far away (53.42%) distanced rehabilitant farmers. Moderately distanced rehabilitant farmers were regularly participating in the social activities like drama, festivals, rituals, school programmes *etc.*, as compared to other two categories and also they had high social status and they help the farmers to getting loans.

Further analysis of data from the table revealed that except organizational participation (60.02%), social status (55.35%) and social participation (31.72%), rehabilitant farmers residing closer to DHQ scored high on occupational status and information access over the rehabilitant farmers residing moderately away and far away from the DHQ. Far away rehabilitant farmers occasionally participated in the organizations like taluk

and zilla Panchayat due to the long distance. Closer distanced rehabilitant farmers were not much interested in the organization like taluk and zilla Panchayat even though they are nearest to these organizations. Therefore, rehabilitant farmers residing moderately away from the DHQ scored high on organizational participation than the other two categories. Further, Rehabilitant farmers residing closer to the DHQ possessed more jobs in the district like clerical work, painting, small scale business of kirani shop *etc.*

Social participation was found to be low (45.94%) among the rehabilitant farmers. However it was very low among the closely distanced farmers from the DHQ. Rehabilitant farmers were distributed in various places in search of their livelihood activities. Communication was poor between the families and individuals due to the wide distribution in different Rehabilitation Centres (RC). However, closely distanced farmers were not actively participating in drama, rituals and village festivals.

Livelihood security of the rehabilitant farmers :

The results in Table 6 depicted that Livelihood Security of the rehabilitant farmers was found to be 54.66 percent. The rehabilitant farmers possessed relatively higher physical capital and financial capital, due to the compensation money provided by the Government for their submerged land and all most all rehabilitant farmers availed benefit of House Construction Grants (HCG) but, rehabilitant farmers natural capital was found to be low because, they were shifted to new area in the year 2005 onwards. During this short span of time they were unable to establish natural capital like irrigation infrastructure, development of the land, vegetation, livestock composition, cropping system and farming system. During data collection it was learnt that, rehabilitant farmers still had strong attachment with their earlier place, so they faced difficulty to adjust with the new place.

Among the components of Livelihood Security

Sr. No.	Sub-components	Distance of rehabilitant farmers from the District Head Quarters (DHQ)			Overall (n=180)
		Far-away (n ₁ =60)	Moderately (n ₂ =60)	Closer (n ₃ =60)	
1.	Organisation participation	53.13	70.23	60.02	61.13
2.	Social status	48.29	64.54	55.35	56.06
3.	Occupational status	50.13	56.44	65.56	57.38
4.	Participation in Social activities	63.29	42.79	31.72	45.94
5.	Information access	48.85	57.14	65.44	57.14
	Social capital	53.42	56.61	55.68	55.24

Table 6 : Livelihood security of the rehabilitant farmers (n=180)		
Sr. No.	Components	Livelihood security index (%)
1.	Natural capital	48.77
2.	Physical capital	72.05
3.	Financial capital	68.28
4.	Human capital	63.59
5.	Social capital	55.24
	Livelihood security	54.66

(Fig.1), natural capital was observed low (48.77%). Human capital (63.59%) and social capital (55.24%) performed moderately among all the capitals. However, physical capital (72.05%) and financial capital (68.28%) performed better among the capitals/components of the Livelihood Security. The results discussed about the natural, physical, financial, human and social capital anywhere in this chapter holds good here also.

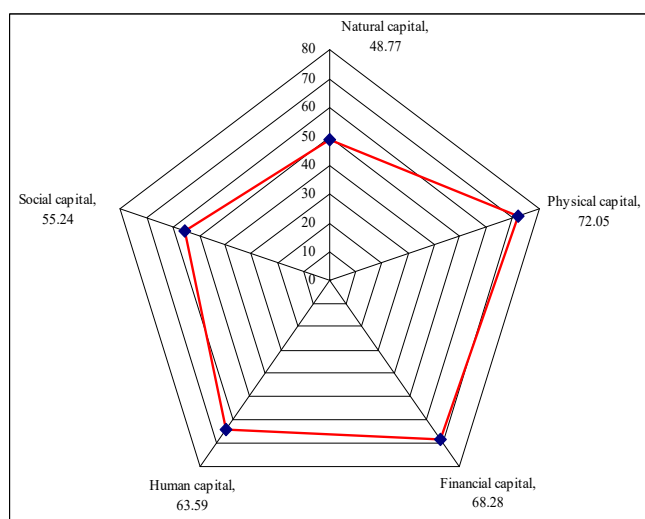


Fig. 1: Livelihood security of the rehabilitant farmers

Natural capital of the rehabilitant farmers was found to be the lowest among all the capitals. Therefore, Government could modify the amount reserved under Land Purchase Grants (LPG) time to time based on the existing land value for the purchase of new land. Improve the existing livestock breeds by establishing artificial insemination (AI) centre at the Rehabilitation Centre (RC) and also there is a need to preserve and enhance the existing natural resources like land, water structures and vegetation through soil and water conservation activities like farm bund, farm pond, gully plugs, check dams *etc.*, wherever needed. Further, an attempt must

be made to create awareness and provide suitable inputs through State departments and NGO's for growing different type of grasses and fodder crops under the Income Generating Scheme (IGS) and also encourage the rehabilitant farmers who practice intercropping, Integrated Farming Systems (IFS) instead of mono cropping and commercial cropping by providing additional benefits/inputs.

Social capital performed moderately among the components of the Livelihood Security. Therefore, social capital could be enhanced by providing proper counseling for rehabilitant farmers to overcome stress and shocks due to the rehabilitation process and take due care to formation of new SHG, youth clubs and farmers hub. Provide need based trainings and initial financial support for these groups under Income Generating Schemes (IGS). Provision could made to open 'cultural centre' at the Rehabilitation centres (RCs) to encourage drama, traditional games, village festivals, folk songs and folk dance for building strong trust and social network among the rehabilitant farmers.

Human capital performed moderately among the capitals. Hence, NGO and related institutions could create awareness about the Income Generating Schemes (IGS), take due care about the rehabilitant farmers residing far away from the DHQ while selection of candidates for training programmes and also take feedback from all the beneficiaries of the training programmes. Guidance should be provided through the follow up work.

Physical capital performed better among the capitals. However, farm implements and farm machineries performed inadequately among the subcomponents of the physical capital. Therefore, Government could make a provision to establish Farm Implements and Machineries Centre unit (FIMC) at each of the Rehabilitation Centres (RC) and hire them at reasonable rate. Due to this, the problem of labour and inadequate availability of the farm implements and machineries at the time of agriculture operation will be reduced.

Financial capital performed better among the capitals. However, savings was observed low among the subcomponents of the financial capital. Therefore, an attempt could be made to formulation of more number of SHGs and link them to Agricultural Technology Management Agency (ATMA) and financial institutions.

Livelihood Security of the rehabilitant farmers residing at different locations :

The results in the Table 7 and Fig. 2 revealed that relatively higher Livelihood Security of 58.58 per cent was observed among the closely distanced rehabilitant farmers from the DHQ. Most of the rehabilitant farmers (35.00%) residing closer to DHQ belonged to high Livelihood Security category followed by moderately away (28.33%) and far away (25.00%). Rehabilitant farmers residing closer to DHQ possessed relatively higher livelihood asset acquisition than the other two categories. Closely distanced rehabilitant farmers easily access the market facilities, mass media, extension contact and R and R project office for required information and also for more private job opportunity, which led to relatively higher Livelihood Security than the other two categories. Therefore, an attempt could be made by the Government, to form strategy to maintain equality among the rehabilitant farmers to ensure equality in acquisition of the assets and developing the natural resources. Provision should be made for hostel facilities

for the children of far away distanced rehabilitant farmers and also priority for selection of students for vocational education. Provide top priority for the far away distanced rehabilitant farmers while, construction of houses and electricity connection and also provide additional benefit (*i.e.* Additional House Construction Grants and Land Purchase Grants) for the family who have selected Rehabilitation Centre (RC) which is far away from the DHQ.

It can also be observed that except social capital (55.68%), rehabilitant farmers residing closer to DHQ scored high on physical, financial, human and natural capital over the rehabilitant farmers residing moderately and far away from the DHQ. Rehabilitant farmers residing moderately away from the DHQ were participating regularly in the social activities like village festivals, drama, rituals etc and easily accessed the information from the elected members of Gram Panchayat, fellow farmers *etc.*, than the other two categories. Moderately distanced rehabilitant farmers had high social status like opinion leadership, progressive farmers, facilitators, members of the co-operative societies and Gram panchayat *etc.*, as compared to other two categories. Therefore, rehabilitant farmers residing moderately away from the DHQ scored high on overall social capital than the closer and far away distanced rehabilitant farmers. The above findings get the support from studies conducted by Hossain and Bose (2006) and Geetha (2007).

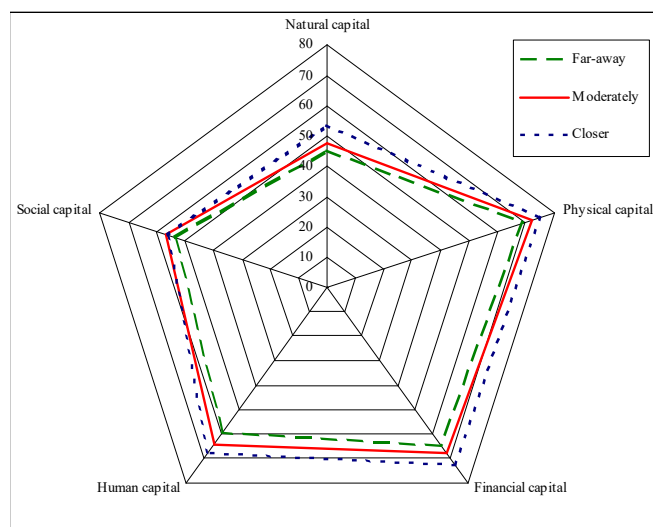


Fig. 2: Livelihood security of the rehabilitant farmers residing at different locations

Conclusion:

The present study will address the issues of rehabilitant farmers and their livelihood status after rehabilitation. Overall study revealed that, Physical, financial and human capital of the rehabilitant farmers residing closer to district head quarter were increased but natural and social capital were decreased. Rehabilitant farmers were lost their social contacts and

Table 7: Livelihood security of the rehabilitant farmers residing at different locations (n=180)					
Sr. No.	Components	Distance of rehabilitant farmers from the District Head Quarters (DHQ)			Overall (n=180)
		Far-away (n ₁ =60)	Moderately (n ₂ =60)	Closer (n ₃ =60)	
1.	Natural capital	45.05	47.63	53.62	48.77
2.	Physical capital	68.89	72.24	75.02	72.05
3.	Financial capital	64.54	67.65	72.65	68.28
4.	Human capital	59.12	64.03	67.63	63.59
5.	Social capital	53.42	56.61	55.68	55.24
	Livelihood security	51.19	54.20	58.58	54.66

natural capitals like land, house etc also lost due to rehabilitation. Individual livelihood will secure only when all the livelihood capitals are equal. The findings of the study provides valuable information to administrators, planners, policy makers and extension workers in order to plan appropriate developmental programmes for Project Displaced Families (PDF). The research study attempted to provide certain strategies to ensure the Livelihood Security of the rehabilitant farmers, which have immense help for development agencies and Rehabilitation and Resettlement (R and R) policy makers who are striving to achieve Livelihood Security of the forthcoming Projects Displaced Families. Though considerable care and thought was exercised in making the study as scientific, systematic and as objectives as possible. Further, study does not cover the landless rehabilitant farmers because, natural capital is one of the component in Livelihood Security, it includes resources like land resources, irrigation infrastructure, farming systems and vegetation.

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17th Year