

## Assessment of livelihood Sustainability Index and Financial Capita Index of Dairy Owners in Adopted Villages under Unnat Bharat Abhiyan

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**ABSTRACT:** The present investigation entitled “Assessment of livelihood Sustainability Index and Financial Capita Index of Dairy Owners in Adopted Villages under “Unnat Bharat Abhiyan” under university adopted five village clusters viz. Masa, Chandur, Kaulkhed (Gomase), Kanheri Sarap and Redwa of Akola District (M.S.). A survey was carried out by selecting 60 livestock owners from each village in such a manner total 300 respondents were selected for the study. Data were collected for the year 2014 to 2019 on profile, status, various determinants of improvement of rural livelihood and constraints of dairy farmers. The result showed that, assessment of Livelihood Sustainability Index was carried on the basis of collected data, majority of respondent 43.33 per cent dairy farmers of western Vidarbha had low livelihood sustainability, 42.19 per cent farmers had medium livelihood sustainability and remaining 14.46 per cent farmers had high livelihood sustainability. In regards to financial constraints less than two-third (62.00 %) respondents had low financial capital followed by 30% medium financial capital and 7.66 % high financial capital.

**Keyword:** Unnat Bharat Abhiyan, Livelihood Sustainability Index, Financial Capita Index.

### INTRODUCTION

The conceptualization of Unnat Bharat Abhiyan started with the initiative of a group of dedicated faculty members of Indian Institute of Technology (IIT) Delhi working in the area of rural development and appropriate technologies on 11<sup>th</sup> November 2014 (Anonymous, 2018).

Animal management and milk production is not a separate activity in India but a sub-system within whole farming system. However, animal husbandry enrolls a vital role in minimizing the risk coverage and to release economic pressure. As in India about 50 per cent land is problematic one because of unfavorable climatic conditions. The farmer of arid and semi-arid area like Akola district facing distressed state of mind and mostly unaware about new techniques of fodder production as well as its preservation. Though the share of agriculture sector is declining consistently in overall GDP but simultaneously the output from livestock is showing an increase in trends. In the present study efforts were taken to identify the determinants of improvement of rural livelihood through dairy farming. Livelihood is a means of way of living. It includes assets, income, capabilities and activities that enable people to obtain things necessary to make a living

(IFRC). Scholars have defined livelihood in many ways and forms. Livelihood has been a major problem for majority of the populations of the world in developing economies. The traditional way of livelihood is inadequate to meet the expanses of contemporary living styles and standards (Sunildro, 2019).

### MATERIAL AND METHODS

The five villages i.e. Masa, Chandur, Kanheri Sarap, Redwa and Kaulkhed (Gomase) were purposively selected under Unnat Bharat Abhiyan from Akola district, where maximum numbers of farmer have adopted dairy farming. A dairy farmer means a farmer maintaining the animal for milch purpose and sell milk to milk collecting centre. From selected 5 villages 300 dairy farmers who have at least 2 or more number of milch animals kept for five years were selected by random sampling method. Thus, from 5 villages 300 dairy farmers were selected. These selected 300 dairy farmers were considered as respondents in the present study.

The livelihood sustainability status is an index which was computed by summation of all the capitals includes human capital, physical capital, natural capital, social capital and financial capital as follows:

Livelihood Sustainability Index (LSI)

$$= \frac{HCI + PCI + NCI + SCI + FCI}{5} \times 100$$

1. Human Capital

$$HCI = \frac{\text{Actual score obtained by the respondent under human capital}}{\text{Maximum possible score}} \times 100$$

2. Physical Capital

$$PCI = \frac{\text{Actual score obtained by the respondent under physical capital}}{\text{Maximum possible score}} \times 100$$

3. Natural Capital

$$NCI = \frac{\text{Actual score obtained by the respondent under natural capital}}{\text{Maximum possible score}} \times 100$$

4. Social Capital

$$SCI = \frac{\text{Actual score obtained by the respondent under social capital}}{\text{Maximum possible score}} \times 100$$

5. Financial Capital

$$FCI = \frac{\text{Actual score obtained by the respondent under financial capital}}{\text{Maximum possible score}} \times 100$$

The coefficient of variation (CV) was estimated by adopting the standard formula reported by Gupta (1997).

**RESULTS AND DISCUSSION**

The collected data have been analyzed taking into account the study objectives. The results have been presented under the following subheads.

**Livelihood sustainability index.** Livelihood sustainability index means different livelihood capital such as human capital, physical capital, natural capital, social capital and financial capital of dairy farmers which would play a greater role to cope with shocks or stresses and make them less vulnerable. The obtained score of various parameters of livelihood sustainability were summed up and index was calculated and results are presented in Table 1.

**Table 1: Distribution of respondents according to livelihood sustainability index.**

Sr. No.	Livelihood sustainability	Frequency	Percentage
1	Low (Up to 33.33)	130	43.33
2	Medium (33.34 to 66.66)	127	42.19
3	High (Above 66.66)	43	14.46
	Total	300	100.00

The results shows that 43.33 per cent dairy farmers of western Vidarbha had low livelihood sustainability, 42.19 per cent farmers had medium livelihood sustainability and remaining 14.46 per cent farmers had high livelihood sustainability. The results were in tune with the findings of Kale (2012), Amresh (2012) who

observed that majority of respondents were having low livelihood sustainability index.

**Financial Capital Index:** he obtained score of parameters of financial capital such as savings, loan taken were summed up and index was calculated and results were presented in Table 2.

**Table 2: Distribution of respondents according to financial capital index.**

Sr. No.	Category	Frequency	Percentage
1.	Low (Up to 33.33)	186	62.00
2.	Medium (33.34 to 66.66)	91	30.33
3.	High (Above 66.66)	23	7.66
	Total	300	100.00

It is clearly reveal that 62.00 % respondents had low financial capital followed by 30 % medium financial capital and 7.66 % high financial capital. The findings were tune with the results of Rathod (2007), Kale (2012), Amresh (2012) they observed that majority of respondents were having low financial capital.

**CONCLUSION**

On the basis of data analyzed in the present study it is concluded that, majority of respondent 43.33 per cent dairy farmers of western Vidarbha had low livelihood sustainability, 42.19 per cent farmers had medium livelihood sustainability and remaining 14.46 per cent farmers had high livelihood sustainability. In regards to less than two-third (62.00 %) respondents had low financial capital followed by 30% medium financial capital and 7.66 % high financial capital.

**FUTURE SCOPE**

The transition pattern of livelihood has often been less studied by the researchers in the past. The asset pentagon has been used as a tool to make comparisons with those who practice traditional means of livelihood and those who follow contemporary means of livelihood. The challenges for sustaining the traditional ways of livelihood have been a major issue for the rural tribal folks. The challenges identified can be tackled by undergoing meticulous study involving all the major stakeholders and a self sustaining livelihood can thus be developed by cooperation from each other. Further, the challenges of livelihood if tackled in a professional way can be used for strengthening their relationships and earning capabilities as well. Therefore, constructive steps in development of these unorganized sectors can boost the living standard as well as bring development in the region as a whole. The future research may be

conducted by identifying all modern economic activities of indigenous rural people from different nooks and corners of the world.

**Conflict of Interest.** To identify the present livelihood sustainability and financial capita index for adopting essential steps to improve it with betterment of the population in the villages selected under Unnat Bharat Abhiyan.

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## REFERENCES

Amresh (2012). Assessment of livelihood status of farmers in distress prone area *M.Sc.(Agri). Thesis* submitted to Dr. PDKV Akola.

Anonymous (2018). Brochure published on Unnat Bharat Abhiyan (UBA) by Ministry of Human Resource Development, Government of India.

Gupta, S. P. (1997). Statistical methods, Sultan Chand and Sons, New Delhi.

Kale, R. (2012). Training needs of farm women in dairy farming, *M.Sc. Thesis (Unpub.)*, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola.

Kale, N. M (2012). Livelihood study on suicide victim farmers of Vidarbha. Dr.PDKV Akola/ *policy brief-2/2012*.

Rathod, A. R. (2007). A study of sustainable livelihoods of Lambani farmers in Hyderabad. Karnataka *M.Sc. (Agri.) Thesis, Univ, Agric. Sci., Dharwad*.

Sunildro, L.S. Akoijam (2019). Challenges to Rural Livelihood Practices: A comparative study among Garos & Non-Garos in West Garo Hills District of Meghalaya, India. *International Journal on Emerging Technologies, 10(4): 283-288*.

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