# **Innovations**

## Border Villages and Rural Development – A Case Study of Punjab (India)

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#### Abstract

India is a land of villages with much of the population residing in rural areas. The father of the nation had rightly said that a nation progresses if villages are progressive. Punjab is an agrarian state and villages are its lifeline. The state shares not only its boundary with the Pakistan but some water bodies also. Out of the several districts in the state, a few of them comprising of several villages are situated close to theinternational border. Problem: This study has been undertaken with main focus on these border villages of Punjab in order to analyse their socio-economic status and assess the impact of remoteness and seclusion of these villages, on the life and lifestyle of the village dwellers. Methodology: For this purpose, a survey on some randomly selected villages from the border district of Gurdaspur was carried out. Group discussions and interviews as wellas a questionnaire were used to collect the relevant information & data. Findings: The results reveal that these villages being near the international border donot have any opportunities to upgrade their socio-economic status. There is lack of skill development, job avenues and industrial development. Although education and schools are available but poor infrastructure, lack of roads & other basic amenities, ineffective implementation of rural development initiatives (due to location) have been responsible for poor development of these villages. Conclusion: The state government should give special emphasis to the development of the villages present in the vicinity of international border in order to make them accessible and easily approachable. All developmental plans shouldwork in an integrated waywith a participatory approach for the effective implementation and the holistic development of these areas.

Keywords: Border villages, Punjab, socio-economic status, basic amenities, rural development,

## 1. Introduction

India is a nation with diverse tapestry of social, cultural & regional heritage. Comprising of a number of states, it shows a wide range of geographical variation. Being triangular in shape the country is surrounded by water on two sides and shares its boundary with other nations on the third side. One such state that shares international border line is Punjab. This land of five rivers has a 553 kilometreslong stretch which it shares with Pakistan.Out of the twenty-nine districts, six of them share the international border. These six border districts are Amritsar, Gurdaspur, Ferozpur, Pathankot, Tarn Taran and Fazilka. These six districts share the international border as well asthe waters flowing through rivers Ravi and Sutlej with Pakistan.Being very close to the line of defence, these border districts have long suffered in various aspects of development.It has been found that nearness to the international border and decade long cross border terrorism have affected the progress and advancement in these villages. As the villages are very close to the international border, security and trans-boundary issues have made these villages less approachable and accessible. Many such factors have affected the socio-economic status of these special areas of Punjab. Sustainability is the core focus of development of a nation and villages are the heart of development (Shukla, 2016; Vignesh, 2019) as 70% of India's population resides in villages. Thus, village development is fundamental in the progress of a nation. Rural development is meant for raising the standard of living and bring economic prosperity of those who reside in remote and sparsely populated places. The visible economic growth of the country is experienced by not more than two thirds of the population and the villages come under the rest one third category.

The availability of a number of essential amenities like drinking water, sanitation, education, transportation, roads etc. are primary to achieve the sustainable development which is an internationally accepted development paradigm. To achieve it several efforts are being done at national and international level both in the rural and urban sections of the society. It has been found that to achieve the goals of sustainable development,basic infrastructure, social, economic, environmental, information and technology play a pivotal role in transforming rural entities into 'smart communities' (Akgün, Baycan& Nijkamp,2014). It is a concept that encourages the optimum utilization of the potential resources of the rural areas to make them sustainable and smart (Guzal-Dec, 2018).

Thus, it is primarily important for the villages to be self-reliant and self-sufficient in basic necessities, a step towards smart village concept. To provide necessities like employment opportunities, better income resources, clean drinking water, hygienic environment, quality education for the children, good metallic roads for better transportation and commuting, the Indian government launched a rural development initiative, Sansad Adarsh Gram Yojana (SAGY) in 2014 following the guidelines of Sustainable Development Goals (SDGs) and Smart Village Concept. Further, to enhance sanitation facilities and generate awareness about cleanliness & clean environment, Swachh Bharat Mission (Grameen).a flagship programme was started by Govt of India in 2019. Itwas initiated to curb open defection and enhance solid waste management. This programme is run by Ministry of Jal Shakti, Government of India as the nodal ministry. The aim of this programme is to bring about behavioural change with regard to sanitary practises and create awareness amongst the rural locals. Similarly, to make clean and safe drinking water available to rural India, Jal Shakti Abhiyan was also launched in 2019. The primary focus was on water conservation, rain water harvesting, renovation of traditional water bodies etc. amongst the population. For a village to be smart, equally important are the social and economic conditions of the residing population and vital towards sustainable achievements. Social structure and economic aspect are fundamental pillars of sustainable development. Aspects like age, education level and occupationetc. are important parameters of a community, hence socio-demography is the social capital of a population (Baruah& Mohan, 2018). Education and age thus are influencing factors in the progress and development of rural community (Liu &Zhang,2011). The rural economy also has an important role in the progress of a village community. The greatest challengetowards the same is a static agriculture based economic structure of the village community. There are inadequate marketing facilities, lack of entrepreneurship, skill development and low competition that act as hindrance towards development (Gracia-Alvarez-Coque, Roig-Tierno, Sanchez-Garcia & Mas-Verdu, 2020). To increase rural economy and its viability, diversification and innovations have to be generated for a better life style and living standards (de Roest, Ferrari & Knickel, 2018; Tu, Long, Zhang, Ge & Qu, 2018). Keeping in mind the above concepts, the present studyis an attempt to assess and analyse some of the villages near the international border especially in district Gurdaspur of Punjab state. All such developmental initiatives are implemented in many villages of the state. The study has been donewith a view to find if seclusion and geographical location (border area) has any influence on the effective implementation of such schemes that further have an impact on the demographic, socioeconomic aspects and development of these villages.

## 2. Methodology

The present study was based on the primary data that was obtained from the study area i.e., district Gurdaspur which is the largest of the border districts of Punjab (Fig 1). The rivers flowing across the state divides it into four geographical regions -Majha (central), Malwa (southern), Doaba (between river Beas & Sutlej) and Pauadh (between rivers Ghaggar& Sutlej). The district is located in the Majha region of northern Punjab and lies at the base of the Himalayan foothills and shares an international border with Narowal District of Pakistan in the north. The district falls under the jurisdiction of the Jalandhar division and is situated between north latitudes 31°36' and 32°34' and east longitudes 74°56' and 75°24'. The district has eight community blocks out of which four are border blocks namely Dera Baba Nanak, Dina Nagar, Dorangla and



Figure 1, Map of District Gurdaspur (Punjab). Highlighted border/study area

Kalanaur. These border blocks were chosen for the presentstudy. Two villages from each border block were selected randomly and in all eight villages (Table 1) were taken up for the study purpose.

S.No.	Border Block	Villages	Site Code
1	Kalanaur	Gadi Kalan	G1
2	-do-	Dostpur	G2
3	Dorangla	Bharath Qazi Chak	G3
4	-do-	Nadala	G4
5	Dera Baba Nanak	Pakhoke	G5
6	-do-	Jaurian Kalan	G6
7	Dina Nagar	Balapindi	G7
8	-do-	Thundi	G8

Table 1. List of selected villages with the respective border blocks and their site codes

All the relevant data associated with the availability of fundamental infrastructure, health and sanitation, education, socioeconomic level, and other demographic parameters pertaining to the chosen communitieswas gathered by conducting surveys. Additionally, the primary data was collected through structured questionnaires from 15 respondents per village were randomly chosen. Thus, from the entire district the data was collected from 120. The gathered information was on the socioeconomic and demographic features of households as well as related to the basic amenities and infrastructure availability. The villagers were also engaged in group discussions to learn about the issues and challenges which they face.

#### 3. Results and Discussions

The study area was surveyed with an aim to have a first-hand report of the available amenities as well as to assess the socioeconomic status of the villages. The basic aim of the study is to assess the border villages are smart villages or Sansad Adarsh Gram. It is an effort to gauge the implementation and effectiveness of various rural development initiative that help to achieve the goals of Sansad Adarsh Gram Yojana or Sustainable Development. The socio-economic information related to the easy accessibility of basic infrastructure, amenities and demographic details of the populations of the villages under survey was collected and the results so obtainedhave been tabulated and discussed below:

#### 3.1Basic Infrastructure and Amenities

The villages were surveyed and data related to basic infrastructure which was available to the residents has been shown in Fig 2.

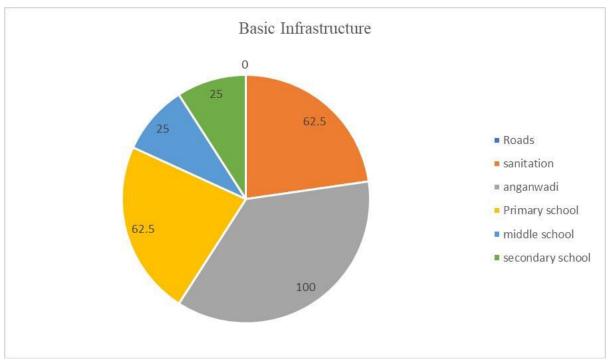


Fig.2 Availability of Basic infrastructure in the selected border villages

Amongst the availability of other amenities, physical connectivity in these villages has been found from poor to moderate. No village was found to have all the roads metallic. Many of the roads were kuccha roads but some villages had interlocking tiles in the internal roads. 50% of the villages did nothave sanitation facilities and primary schools. Only 25% of the villages had middle school and secondary schools. Similarly, a dispensary or a primary health centre and veterinary dispensary was present in 50% of the villages taken up for study. The facility of drinking water was not available in 30% of the villages whereas in the rest of the villages it was moderately available (Fig 3).

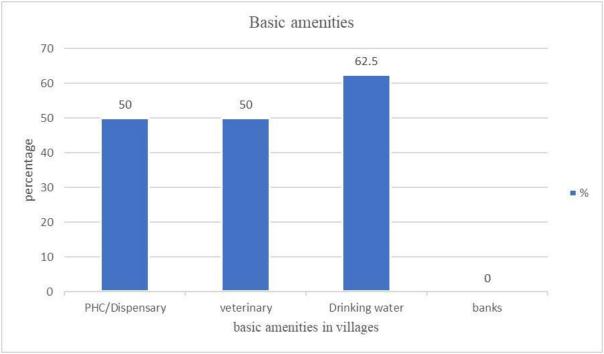


Fig. 3 Availability of Basic amenities in the selected border villages

According to an assessment done by the Centre for Budget and Governance Accountability, Indiain 2023, just 33% of the overall rural road network is presently operational, and there is an urgent need to fill the infrastructure gaps for the rural areas to develop and prosper properly.

Similarly, the basic amenities which are fundamental to sustainable existence were not completely available in all the villages under study as represented in Fig 3. Some of the amenities were available in the nearby villages or towns and these facilities along with their physical connectivity status has been shown in the Table 2 below:

Table 2: Basic amenities and the connectivity status n the selected border villages

S.No.	Infrastructure	Connectivity status*
1	Distance of Mandi	Moderate to difficult
2	Distance of Bank	Moderate
3	Distance of Village market	Moderate
4	Post office	Easy
5	ATM	Easy
6	Internet cafe	Moderate
7	Hospital/Women & Child Care Centre	Moderate to difficult

Source: Field survey. \*Distance of stratified connectivity status: Easy 0 km, Moderate 2-5 km, Difficult 5-10km.

It was found that many of the facilities mentioned in the above table are available in the villages but facilities like banks, markets and internet café are available at distance of 2-5 km from the village. While for certain other facilities such as hospitals/Women & child care centres the villagers have to travel a distance of 5-10 km which is difficult in case of emergencies and in odd hours.

## 3.2 Demographic characteristics

Further the data related to the demographic characteristics such as age, occupation, income and level of education of the population surveyed were also analysed and the results are presented in Tables 3&4 and Figure 4&5

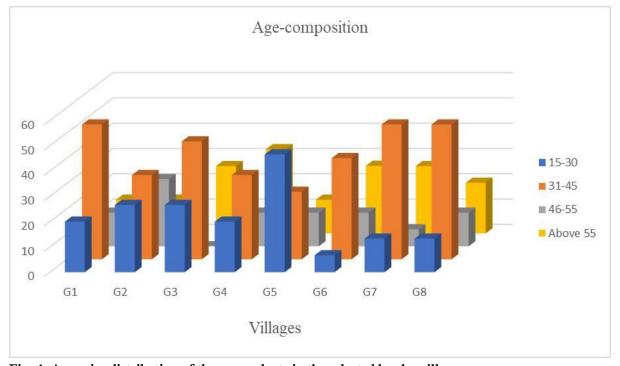


Fig. 4: Age-wise distribution of the respondents in the selected border villages

#### 3.2.1 Age-wise population distribution

The details of the age composition reflect that 4 out of 8 villages that were surveyed had population in the age group of 31 to 45 years and was above 50%(Fig. 4). In the age group of 15-30 years and above 55 years, almost similar percentage of population has been found. Due to a lack of basic infrastructure, such as education, health care, and sanitation, as well as the remoteness and sensitivity of the examined area, the young population is moving out of the villages/ districts in pursuit of better future prospects. Better job avenues, educational opportunities and a good chance for making a better living standard were cited as some of the reasons for migration by young people in a survey-based study on rural youth migration in the district of Hisar, Haryana (Tripathi, H. et al., 2018).

Table 3.Occupation-wise distribution of the respondents in the selected border villages.

S. No.	Villages	Occupation				
		Agriculture	Service	Shopkeeper	Labour	others
1	G1	40*	-	-	60	-
2	G2	26.6	6.7	6.7	60	-
3	G3	20	13.3	13.3	53.3	-
4	G4	86.6	6.6	6.6	-	-
5	G5	26.6	-	-	46.6	26.6
6	G6	66.6	13.3	6.6	13.3	-
7	G7	26.6	26.6	6.6	40	-
8	G8	33.3	6.6	13.3	46.6	-

Source: Field survey. \*Percentage

## 3.2.2 Occupation-wise distribution

Occupational diversification is a vital component of sustainable development. Earning a good livelihood can be through self or wage employment or both. Job diversification helps rural people to participate in farm activities such as livestock crop production and non-farm activities like MNREGA, depending on availability(Kundu, A and Das, S.,2021). The data of occupationalengagements of the villagers in this study are shown in theabove Table 3. It indicates that Agriculture is the occupation of the larger proportion i.e.,22.6% of the population whereas 13.3 to 60% of the people work as labour. An equal proportion of population i.e.,6.6 to 13.3% is engaged as shopkeeper and the same percentagein service/job. Several studies indicate that agriculture is the main source of employment and income for individuals living in rural areas(Singh & Rangnekar, 2010; Sekhon, 2014; and Kapur,2019).

#### 3.2.3 Status of Education

Education is another parameter that influences the growth and development of a society. It is the building block of the nation. The level of education of the villagers in the study area shows the highest percentage (46.6%) of the population is illiterate in G4 and G8 villages (Table 4).26.6% population is under matric in village G2 while 40% of the population is matriculate in only three villages. 33.3% of the population has attained education up to higher secondary in village G3. The maximum number of graduates have been found in only three village (6.6%). Only 26.6% population attained postgraduation in village G1. The results show that as the level of education increases, the percentage of individuals gradually decreases.

S. No.	Villages	Education					
		Illiterate	Under matric	Matric	10+2	graduate	Post- graduate
1	G1	-	20	40	13.3	-	26.6*
2	G2	20	26.6	20	26.7	-	-
3	G3	33.3	13.3	13.3	33.3	6.6	-
4	G4	46.6	6.6	26.6	20	-	-
5	G5	40	6.6	40	13.3	-	-
6	G6	33.3	-	40	26.7	-	-
7	G7	26.6	6.6	33.3	13.3	6.6	13.3
8	G8	46.6	6.6	26.6	6.6	6.6	6.6

Table 4. Education level of the respondents in the selected border villages

Source: Field survey. \*Percentage

The possible reasons could be poor school facilities, a lack of higher education institutions in and around the communities, drop-out rate and parents with low educational backgrounds. Families that maintain better standards of living have lower dropout rates. For the youth of the border areas to have the same facilities as their peers residing in Punjab's non-border areas, full-time teachers in schools and better work opportunities (Kaur, 2016) should be available nearby. According to a study on the rural demography of India, of the questioned people, 64% of the individuals had never attended school before, while 29% had finished fewer than 5 years of education (Sekher, 2011).

#### 3.2.4 Income diversification

Incomeand the source of income both are important parameters of socio-economic status and reflect the health of the society. As explained earlier that the villagers engage themselves in agriculture, shopkeeping/business, labour, jobs etc. to earn the livelihood. This influences their earnings and thus different strata/groups of monthly income were seenw.r.t to their occupational engagements. The results so obtained are depicted in Fig. 5 given below:

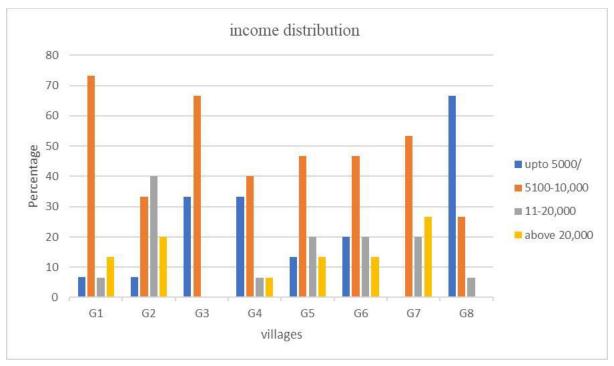


Fig. 5. Income-wise distribution of the respondents in the selected border villages

The survey also revealed the income wise thehighest percentage of 73.3% is of those who have a monthly earning between Rs 5100 to 10,000.By and large all the villages have maximum percentage of this income group followed by people who earn up to Rs 5000 per month. Lesser percentage of villagers have an earning above ₹20,000 per month and was maximum in village G7 (26.6%).

#### 3.3 Sources of Rural Credit

Punjab is an agrarian state and life in villages revolve around agriculture. Most of the land owners are marginal and small-scale farmers and some are tenants. Capital formation in agriculture is very low and could be increased only through new and modern technologies. Farmers hesitate doing so due to heavy capital investment, subsistence& survival and paucity of working capital (Prince, S., 2020). It has been found thatdue to meagre income opportunities, the social life in villages to a large extent depends on taking money on credit. It is maybe needed due to long gestation period between sowing and harvesting of crops, personal expenses like wedding, deaths, repay old debts etc. Depending on the source, the rural credit markets can be dichotomized into a 'formal' and an 'informal' sector. Formal sector includes Banks, co-operative banks and societies while informal sector comprises of moneylenders, relatives, businessmen etc. The data collected during the survey is presented in Table 5 given below:

Table 5. Source of Rural Credittaken by the respondents in the selected border villages

S. No.	Villages		Credit					
		Bank	Relatives	Moneylender	others	Never		
						taken		
1	G1	13.3*	20	-	-	66.6		
2	G2	33.3	40	26.6	-	-		
3	G3	13.3	13.3	-	26.6	46.6		
4	G4	53.3	-	-	-	46.7		
5	G5	33.3	46.6	6.6	13.3	-		
6	G6	40	35.7	13.3	6.7	-		
7	G7	13.3	26.6	-	-	60		
8	G8	13.3	26.6	13.3	33.3	13.3		

Source: Field survey. \*Percentage

The above data shows that the people in villages under study take loan from various sources as mentioned earlier. Maximum number of people who take money from banks on credit is 53.3% in only one village (G4) followed by 40% in G6 and 33.3% in G2 and G5 villages. The highest percentage of population that takes money on credit from relatives is 46.6% in Village G5. The above table reflects that average percentage of people prefer taking loan from the informal sector rather than relying on formal sectors. In more than 50% of the villages the people have never taken up money on credit from any of the above said sources. The highest percentage of 66.6 of such people is in village G1 followed by village G7.

People prefer taking credit from informal sectordue to reasons likelesser availability of banks in or around the villages, predominance of small cultivators with insufficient collateral personal relationships or familiarity with informal sources (Bose,1998; Mani& Goud, 2023) and lack of awareness & education as a hinderance in loan filing documentation. In a study conducted in Pakistan, it was found that a number of variables, including agricultural experience, total land ownership, monthly income, education, and family size, significantly influenced a farmers' ability to access financing. Studies carried out in several parts show that socio-economic considerations are significantly important assess to agricultural credit(Saqib et al., 2017,2018; Chandio et al., 2021; Mwonge& Naho,2021

#### 3.4 Problems and Challenges

It has been found through survey that the villages in border district of Gurdaspur have an average earning of 5100-11000/ per month. Majority of the population is matriculate and have good size of landholdings with a trend of taking money on credit preferably from banks. But a large proportion i.e.62.5% have never taken loan. Majority of the villages have a growing population comprising of young and adult people. The basic amenities are lacking in many of the villages under study. Much of the population has labour as their occupation which shows the lack of skill development and job opportunities. Although agriculture is the main occupation but nearness to the zero line does not allow the farmers to diversify crop cultivation and enhance their income.

Due to security reasons farmers are not allowed to grow tall crops and restricted visiting hours to the fields near or across the fence leave the farmers helpless in many agricultural advancement practises. There is also lack of medical facilities both for man and cattle which becomes difficult in emergencies. Poor infrastructure in schools, non-availability of teachers and higher education institutes, job opportunities are many of reasons for high drop -out and literacy rate. No set-up of industrial units is also another drawback in these villages of the border belt. Hence special development plans with holistic and participatory approach should be made with a focus on these areas so as to bring them to main stream of the state. The lack in industrial development, infrastructure of marketing has deprived the people of employment opportunities and better income perspectives.

#### 4. Conclusion

The seclusion of these areas/ villages has also given rise to unemployment amongst the youth.Due to lack of effective implementation of skill development programmes, majority of the population in these villages is engaged in labour setting up ofagro-based units for enhancing entrepreneurial skills, creating employmentensures income generation and make villages self-sufficient. There are various rural development programmes that are run by the centre and the state government for better development.It seems that these border villages have lacked ineffective implementation of such initiatives. Various rural infrastructures like roads, schools, irrigation facilities, health sector etc. need considerable improvement. Micro-financing can be promoted through formation of self-help groups in the villages. But close proximity to the international border is a limiting factor in these villages towards effective implementation of all such

Thus, it becomes more important to identify the problems/issuesof border villages and then effectively design/redesign the development programmes for better progress & development.

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