ASSET MAPPING OF SUS VILLAGE



M.SC (BATCH 2018-20)

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1.0 INTRODUCTION:

Planning is an integral part of the functioning of any government, at the local level it is social decision making which changes lives and future of the society. Planning for well-being of the people requires proper understanding of the local context including the resources, economic activities, social and cultural environment of the area and this helps in harnessing the manner. The basic idea of decentralization is sharing the power of decision-making with lower levels in the organization, as people living there, their issues need to be solved and they plan best in teams; hence it is decision making for common cause, creative and structured problem-solving process.

Spatial planning involves making decisions based on the spatial patterns and processes such as distance, location, neighbourhood and proximity of various natural resources, infrastructural facilities, human activities and welfare activities in a set of terrain conditions.

Remote sensing plays a key role in community driven management and acquires special importance in the context of the process of participatory, integrated decentralized planning. Now with the availability of one-meter spatial resolution satellite data in public domain in India, Remote Sensing and GIS technologies are capable of creating various detailed natural developmental potential and improve the living conditions of the people, particularly the disadvantaged sections. In other words, it is social or organizational activity of developing an optimal strategy for solving problems and reaching the desired goal. In decentralized planning, local organizations formulate, adopt, execute actions and supervise the plan in participatory resources information layers on large scale in short time. The synoptic view provided by satellite imagery offers technologically the most appropriate method for quick and reliable mapping and monitoring of various natural resources both in space and time domain. It depicts the terrain, natural resources and human activities along with infrastructure facilities as an integrated view, which is the base for spatial thinking and further decides on intervention required and forming planning strategy. It helps to make an informed decision at the Panchayat level for effective and transparent planning, implementation & monitoring of centrally or state sponsored schemes, governance and finally spatially enabling the Nation.

National Remote Sensing Centre has developed a Geo-Portal called Bhuvan Panchayat Portal (url: http://www.bhuvan-panchayat.nrsc.gov.in) This has been designed and developed to help in Panchayat Level Planning and Governance. This Portal comprises High Resolution Datasets and Thematic Maps to enable Panchayat Level Planning. Besides high-resolution spatial data it provides enabling environment for asset mapping, activity planning, implementation, monitoring and interactively report generation up to Panchayat level. Asset Mapping Module helps in mapping the assets and creating the Assets Directory.

A. Asset Directory:

The Asset Directory is the comprehensive compilation of different types of assets/resources available in various parts of the country which are being created under several schemes of Government of India, States and communities by themselves to facilitate the local population. Every asset type is identifiable with a unique code. A unique symbol is associated with each asset group and every category is presented in a unique colour. An Android based Mobile application is also available in this portal using which the assets can be mapped.

The Asset Directory is made on community based and village-based assets in a Panchayat. The compilation and categorization of assets/resources is in reference to the Space based Information Support for Decentralized Planning (SIS-DP) Project. To add assets and attributes not available in the asset inventory, there is a provision to add these under 'other asset' and 'other attribute'

1.1. Purpose

Asset mapping provides information about the strengths and resources of a community and can help uncover solutions. Once community strengths and resources are inventoried and depicted in a map, you can more easily think about how to build on these assets to address community needs and improve health. Finally, asset mapping promotes community involvement, ownership, and empowerment.

1.2. What is a community asset?

A community asset or resource is anything that improves the quality of community life.

Assets include:

- The capacities and abilities of community members.
- A physical structure or place. For example, a school, hospital, or church. Maybe a library, recreation centre, or social club.
- A business that provides jobs and supports the local economy.
- Associations of citizens. For example, a Neighbourhood Watch or a Parent Teacher Association.
- Local private, public, and non-profit institutions or organizations.

1.3. When to use Asset Mapping

You want to start a new local program and need information about available resources. For example, you are interested in teen mothers finishing their education. You could draw a community asset map that identifies school drop-out prevention, tutoring, and education counselling programs for young teen mothers. This helps you see what already exists, or if support services are lacking. You may find it is necessary to develop a program to help young mothers finish their education.

You are making program decisions. An asset map can help you identify community assets and concerns. The map results help determine new directions for your program or identify new programs that need to be developed. For example, an asset map of food banks and nutrition resources for low-income families in your neighbourhood may reveal that there is a lack of programs, or that existing programs are located in areas that are not accessible to families in your service area.

You want to mobilize and empower the community. If you involve different community members in constructing the asset map, the process itself can be an organizing tool. For example, mapping local public services and identifying the dollars spent per community member can mobilize residents to lobby city or county council members to improve local public services.

Total No. of Houses	3784	-	-
Population	4,865	2,435(MALE)	2,430(FEMALE)
Schedule Caste	750	388	362
Schedule Tribe	122	65	57
Literacy	83.31 %	90.92 %	74.80 %
Total Workers	1,975	1,457	518
Marginal Worker	111	59	52

Table 1: Demography of sus

2.0 STUDY AREA:

2.1 INTRODUCTION:

According to Census 2011 information the location code or village code of Sus village is 556123. Sus village is located in Mulshi Tehsil of Pune district in Maharashtra, India. It is situated 22km away from sub-district headquarter Paud and 12km away from district headquarter Pune. As per 2009 stats, Sus village is also a gram panchayat.

The total geographical area of village is 912.97 hectares. Sus has a total population of 4,865 peoples. There are about 3784 houses in Sus village. Pune is nearest town to Sus which is approximately 18km away.

2.2 HISTORY:

Sus Road is a newly developed location after the expansion of Pune city limits in the late 1990s. Real estate in the area has increased tenfold in the past decade in order to meet the growing demand of residents. Once an underdeveloped road, Sus Road was renovated in 2008 on the occasion of the Commonwealth Youth Games held in the neighbouring suburb of Balewadi. The road width was increased, and a six-lane asphalt road was laid to promote growth and travel. Few more additions included a recreational park near the bypass intersection and pedestrian footpaths.

2.3 GEOGRAPHY AND CLIMATE

Sus Road lies in a valley and is surrounded by hills both sides. The average elevation the road travels on is 550 m (1,800 ft), gradually increasing while nearing the villages of Sus and Nande. Nearby hills include the Baner and Pashan Hills, Sutarwadi Hill and the Lavale Hills. Sus Road shares the climate of Pune city, with warm summers, moderate rainfall and moderate winters.

2.4. LOCATION OF THE STUDY AREA:



Figure 1: Location of study area

3.0 METHODOLOGY:

Phases of assets mapping of Panchayat in GIS environment

A: Identification of potential resources from different sources Hill shade and Slope mapping using satellite images for information on different categories Primary data was collected from plot to plot survey using GPS ESSENTIAL. Identification of individual and community resources using G.P.S. Population data of the study area from census of Pune, Maharashtra.

B: Asset mapping for E-Panchayat and good governance Asset mapping create a comprehensive list of community resources that can provide programmes, services and a base of support and partnership for neighbourhood network (Burns et. al. 2012). It may be used in conjunction with the website creation tool to create navigation of the assets. Creation of Area of Interest (AOI) of that Gram Panchayat with village boundaries. Collection of GCP of different assets. Identification of different assets from Google Earth.



Figure 4: Basic assets of sus

4.0 RESULT:

After preparing the asset map it has been observed that the most important assets are concentrated in one region which is the most central region of Sus Village.

Health Care Centre, Pharmacies, schools, ATMs, Banks, Markets are majorly seen in the central part of the village (Figure 4).

Due to rugged topography in certain parts of the village there is lack of accessibility thus very few or no resources can be seen.

			`Total Assets
1	1.1	Educational Facilities (School)	3
	1.2	Medical and Health Facilities	
		Hospital	2
		Pharmacy	6
	1.3	Sanitation	
		Public Toilets	2
	1.4	Postal and Telecom Services	1
	1.5	General Assets	
		Temples	13
		Garbage Disposal Sites	3
		Water Source	3
	1.6	Government Center	2

Table 1: Total assets in sus

5.0 ANNEXURE:

BASIC PARAMETERS	SURVEY 2018
Total Population	4865
Male	2435
Female	2430
Total Household	3784
Total no. of Self-Help Group	20
Total area of village (in ha)	912.173
Net sown area (in ha)	736.157
Total unirrigated land area (in ha)	102.302
Area irrigated (in ha)	633.855

TABLE 3: Basic Parameters

TABLE 4: Economic-Development and Livelihood

Economic-Development and Livelihood	Survey 2018
Soil Testing Center	NO (5-10 KMS)
Gov Seed Center	NO (2-5 KMS)
Fertilizer Shop	NO (5-10 KMS)

TABLE 5: Financial inclusion

Financial inclusion	Survey 2018
No of SHGs accessed Bank Loans	9

TABLE 6: Health, Nutrition and Sanitation

Health, Nutrition and Sanitation	Survey 2018
Community waste disposal system	NO
Community Bio-Gas or recycle of water for production use	NO
Is the village open Defection Free	NO
Availability of Anganwadi Center	YES
No of total children in the age group 0-3 yrs.	91
No of children aged 0-3 yrs. Registered under Anganwadi	52
No of children aged 0-3 yrs. Immunized	70

TABLE 7: Women Empowerment

Women Empowerment	Survey 2018
No of Household mobilized into SHGs	215
No of Household mobilized into producer Groups	2
No of Household supported by village-based Agriculture	2
Extension Workers	
No of Household supported by village-based Livestock	35
Extension Workers	

TABLE 8: Key	Infrastructure Parameters
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Key Infrastructure Parameters	Survey 2018
% of household engaged in farming activities	20.0
% of household engaged in non-farming activities	80.0
Availability of Banks	YES
Availability of ATM	YES
Whether the village has an internal cc/brick road	NO
Whether the village is connected to all weather road	YES
Availability of Public Transport	BUS
Availability of Internet Café	NO (2-5 KMS)
Availability of electricity for domestic use (in hrs.)	>12 HRS.
Availability of Public Distribution Center	NO (5-10 KMS)
Availability of Markets	WEEKLY HAAT
Availability of Piped tap water	<50% HABITATION
	COVERED
Availability of Telephone Services	MOBILE
Total no of household using clean energy (LPG/BIO-GAS)	3699
No of household with Kuccha wall and roof	45
Availability of post office	YES
Availability of school	MIDDLE-SCHOOL
Availability of Vocational Educational	NO (5-10 KMS)
Centre/ITI/RESETI/DDU-GKY	
Availability of Sub-Center/PHC/CHC	SUB-CENTER
Availability of Veterinary clinic	YES