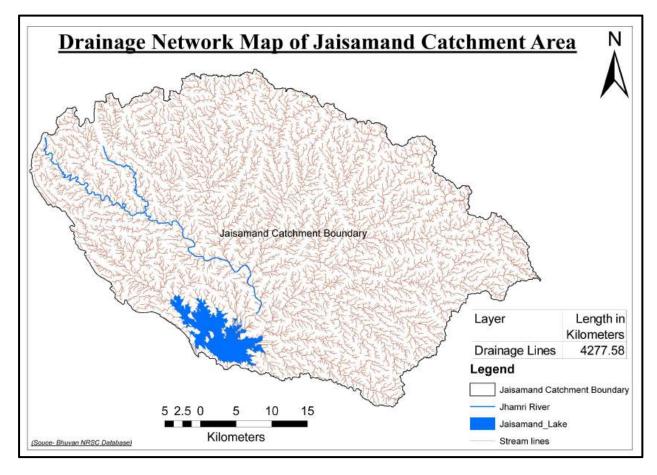


Operationalising Jaisamand Consortium Approach to Climate Change<sup>1</sup>



Drainage Network map of Jaisamand Catchment area: Map prepared by Surender Singh Rathore GIS analyst JJVS

Facilitating organisations: Society for Promotion of Wastelands Development (SPWD), Saint Mary of the Angels, Fatehpura (SMA) and Institute for Ecology and Livelihood Action (IELA)

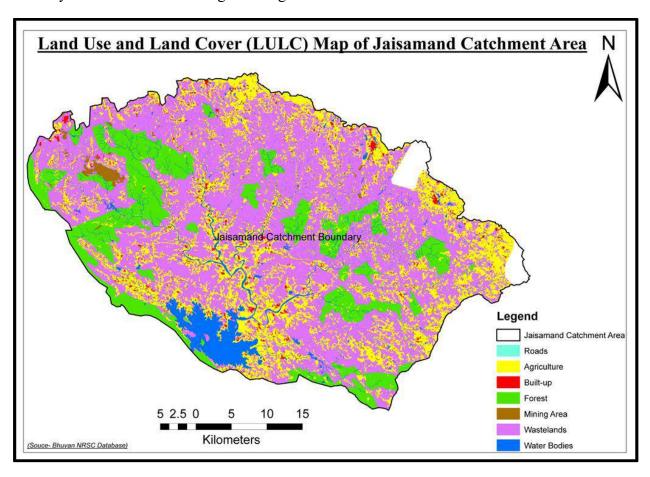






<sup>&</sup>lt;sup>1</sup> Jaisamand Consortium Partners: Jagran Jan Vikas Samiti (JJVS), Pryatana Samiti (PS), Hanuman Van Vikas Samiti (HVVS), Rajasthan Matsya Sangh (Jaismand).

**Background:** Jaisamand consortium came into existence in 2007 to help facilitate a basin level approach to development in Jaisamand Catchment area. Over the last 17 years of its existence. Jaisamand Consortium Partners have worked on intgrated land use development in 20 Panchayats of Jaismand covering 77 villages of Jaismand between 2007 and 2017.



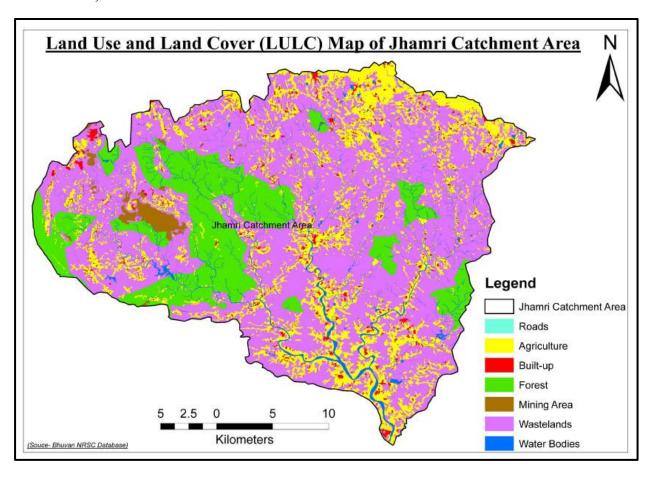
Land Use land cover map Jaisamand Catchment area: Map prepared by Surender Singh Rathore GIS analyst JJVS

This map prepared by Jagran Jan Vikas Samiti (JJVS is a member of Jaisamand Consortium) gives a glimpse of the major land use categories in Jaisamand covering 1,78,894.22 hectares having Revenue lands (depicted as wastelands in the map - 50.56%), agricultural lands (including double and triple cropped areas 26.12%), forest land (15.3%), water bodies (5.3%), built up area (2%) mining areas (0.69%) and roads (0.01%).

## Issues highlighted at the meeting

There are two major rivers flowing through the region namely Jhamri and Gomti. Jhamri river basin covers 79,667.53 hectares and having having 54.95% revenue lands, 22.09% agriculture lands, 16.54% forests, 2.95 devoted to water bodies, built up area of 2.16%, mining 1.3% and roads 0.01%. The name wastelands has a history dating back to British land classification, this is however a misnomer for most part as it provides the grazing land for cattle. Jhamri river basin

accounts for 40% of the supply of milk to Saras dairy with Vali village being the highest individual supplier in the district. This supply is however mostly from buffaloes kept by the Dangis of the region who occupy most of the irrigated land in the plain region (next to river and water bodies) of Jaisamand Catchment area.



Land Use Land Cover Map of Jhamri River Basin: Map prepared by Surender Singh Rathore GIS analyst JJVS

Since Prayatana Samiti has been working on pasturelands since the early nineties, they have taken the responsibility to develop village pastureland committees for the protection and management of these pasturelands. The 1980 Forest Conservation Act had brought in its wake two major developments

- a. Shifting the onus of provision of community (forest) needs to the revenue and pasturelands of the village and consequently involvement of the Forest Depart on such lands in terms of Community Forest Development.
- b. Progressive exclusion of communities from the forest which had already begun with the wildlife protection act of 1972.

Despite this Forest lands were commercially exploited exploited as before. In Rajasthan, the operations of the Forest Development Corporation resulted in large scale destruction of the

forests for timber and the production of charcoal. It was only the mid eighties that such destructive use of the forests were stopped.

## Land use table of Jhamri river basin and Jaisamand Catchment area

and Classification of Jamri River Basin	Area (Ha.)	%	Land Classification of Jaisamand Catchment	rea (Ha.)	%
Agriculture	17597.64		Agriculture	46725.47	26.12
Agriculture - Fallow Land	732.86	22.09	Agriculture - Fallow Land	2598.85	
Agriculture - Multiple crop land	7778.16	CATALOGICAL STREET	Agriculture - Multiple crop land	22860.67	
Agriculture - Single crop Land	9086.62		Agriculture - Plantation	0.77	
Built-up	1722.44		Agriculture - Single crop Land	21265.18	
Built Up - Industry / Factory	67.43	1	Built-up	3569.66	2.00
Built Up - Rural Hamlet and Dispersed Household	851.20	2.16	Built Up - Core Urban Residential	43.87	
Built Up - Rural Open Space / Layout	51,12		Built Up - Industry / Factory	67.43	
Built Up - Rural Village Settlement	717.64		Built Up - Peri Urban	22.63	
Built Up - Transport Infrastructure Railway Station	2.05		Built Up - Rural Educational	3.25	
Built Up - Transport Network	14.81		Built Up - Rural Hamlet and Dispersed Household	1736.68	
Built Up - Transport Network State Highway	18.19		Built Up - Rural Open Space / Layout	63.12	
Forest	13177.54		Built Up - Rural Village Settlement	1531.35	
Deciduous Open Forest	13177,54		Built Up - Transport Infrastructure Railway Station	2.05	
Mining Area	1032.74	1.3	Built Up - Transport Network	21.36	
Others - Mine	674.42		Built Up - Transport Network State Highway	77.92	
Others - Mining Dump	188.88		Forest	27362.46	15,30
Others - Quarry	169.44		Deciduous Open Forest	27362.46	
Wastelands	43777.96	7.88 3.93 <b>54.95</b>	Mining Area	1127.05	0.63
Wasteland - Barren Rocky	57.88		Others - Mine	713.70	
Wasteland - Dense Scrub Land	5298.93		Others - Mining Dump	188.88	
Wasteland - Sparse Scrub Land	38421.14		Others - Quarry	224.46	
Water Bodies	2351.70	8 4 2.95	Wastelands	90455.51	
Water Body - Canal / Drain	3,58		Wasteland - Barren Rocky	522.14	
Water Body - Lake / Pond	341.84		Wasteland - Dense Scrub Land	13526.32	
Water Body - Reservoir / Tank	7.34		Wasteland - Desertic Sandy Area	2.54	
Water Body - River	1998.93		Wasteland - Sparse Scrub Land	76404.51	
Roads	7.51	0.01	Water Bodies	9634.76	
National Highway	7.51		Water Body - Canal / Drain	3.58	
rand Total	79667.53		Water Body - Lake / Pond	5655.05	
			Water Body - Reservoir / Tank	13.20	
			Water Body - River	3962.93	
			Roads	19.31	0.01
			National Highway	19.31	0.01
			Grand Total	178894.22	1

An examination of the historical data related to forest cover will indicate a much larger area covered but which has slowly been degraded due to successive alienation of local communities from the forests, forcing them to resort to depend more agriculture cultivation and animal husbandry than on the minor produce in the forest. Baghdarra nature park located in the North West Region of Jhamri has got its name from the previous existence of tigers in the region.

The large scale nation wide protests from communties dependant on the forests resulted in the then Tribal Commissioner of India Dr B D Sharma writing a 29 page letter to the President of India pointing out how with one stroke of the pen, forest dwellers were suddenly turned into thieves on their own land. The continued protests ultimately resulted in the passing of the Forest Rights Act in 2006.

However it was only in September 2023 that about 1,00,000 hectares of land were granted under the Community Forest rights across Rajasthan (very slow recognition of community forest rights prior to that). Since Jhamri river has about 4,000 of forest land out of the 5,000 has of land granted in Kurabad, JJVS has taken up the task of seeing how this opportunity can be used to

blend traditional knowledge and wisdom with the help of modern geo spatial tools and latest technological developments related to renewable energy and knowledge of bio integrated farming and modern medicine. JJVS has 38 years of experience of working with indigenous medical practioners (gunis) and has strenthened this by involvement of ayurvedic doctors who can understand the relevance of the indigenous foods and herbs in the indigenous medical practise reflected by the gunis.

Considering that Hanuman Van Vikas Samiti (HVVS) has been working closely with women in more than 30 villages under the Sakhi programme relating to a number of questions related to women's empoerment, how the women of Jaisamand Catchment area can be better mobilised with combined efforts of Consortium members is also being discussed.

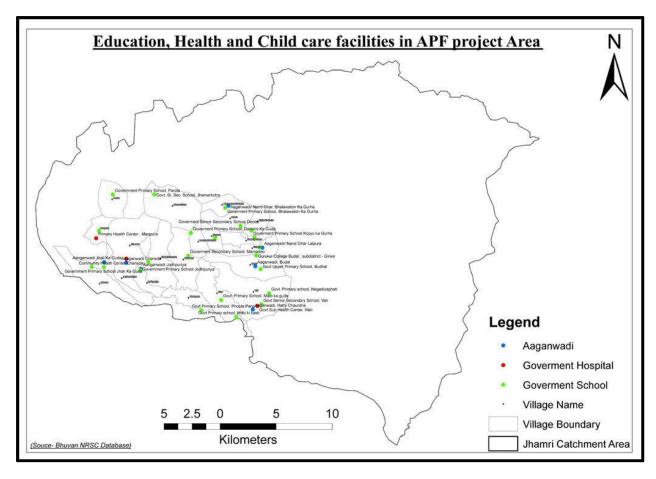
Rajasthan Matsya Sangh currently working in with 23 fisheries cooperatives in Jaisamand, Mahi and Kadana Dam, highlighted the issues related to the destruction of fish habitat including the upper catchment areas which were used as breeding grounds by the fish. This destruction has resulted in decline of fish catch, loss of the fish biodiversity and spread of Tilapia an invasive fish species which devours everything else.

The question of large scale presence of invasive species was related to habitat destruction and loss of pollinators, insect predators like frogs which have also caused the outbreak of cerebral malaria in some pockets. While mining and stagnant water may be a cause in some cases, the loss of habitat for frogs, dragonflies, earthworms, pollinators and other 'human friendly' species in addition to monoculture plantation and cropping systems is also the major cause of disease spread not only in human beings but animals and biodiversity as well.

## Suggested activities:

Considering that between the consortium members there is a presence in the entire catchment area of Jaisamand, it was suggested that this could be taken up in manner that interlinkages could be better understood with the help of the interdisciplinary skills available with the consortium members. With the help of Institute for Ecology and Livelihood Action (IELA), Society for Promotion of Wastelands Development (SPWD), the prime mooter behind the creation of Jaismand Consortium and St Mary of the Angels Fatehpura (SMA) who has developed a module around the Sustainable Development Goals (SDGs) which can be shared with the schools of Jaisamand Catchment Area.

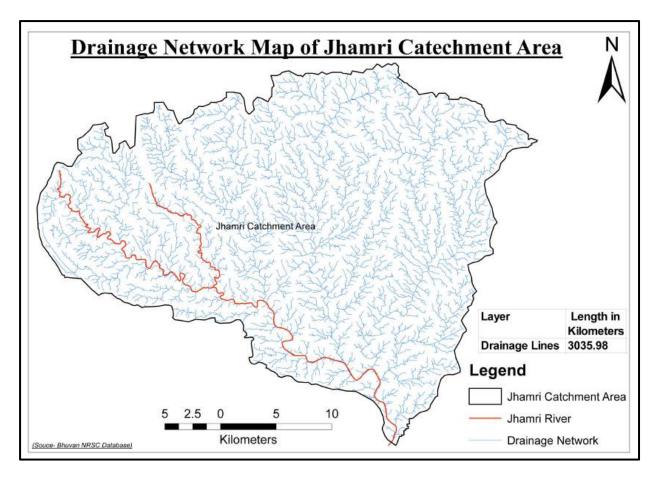
To start with the Consortium took a decision to commemorate World Wet Land Day on 2<sup>nd</sup> February. Prayatana Samiti (PS) will be taking the lead in finalising the venue and IELA will take the lead in preparing the document highlighting the concerns and issues related to the wetlands of Jaisamand Catchment area building on the last years programme coordinated by it.



Education Health and Child Care facilities in APF project area: Map Prepared by Srender Singh Rathore GIS analyst JJVS

Since JJVS with the help of IELA is also working to build up the Nutrition and health care programme in proposed Azim Premji Foundation project area, it was proposed that with the help of SMA, it would be possible to better mobilse the schools of the region based on the excellent work done by the students of SMA at its latest yearly exhibition in October 2024. Since SMA will be celebrating its 75 anniversary this year, this tie up with Jaisamand Consortium members will help SMA to provide a more practical orientation to exhibition while simultaneously helping to guide the students of schools in Jaisamand. Given that COP 30 is to take place in Brazil in November 2025 the outputs that are produced by the students can help provide a vision of what the future of Udaipur district in general and Jaisamand Catchment area in particular would look like.

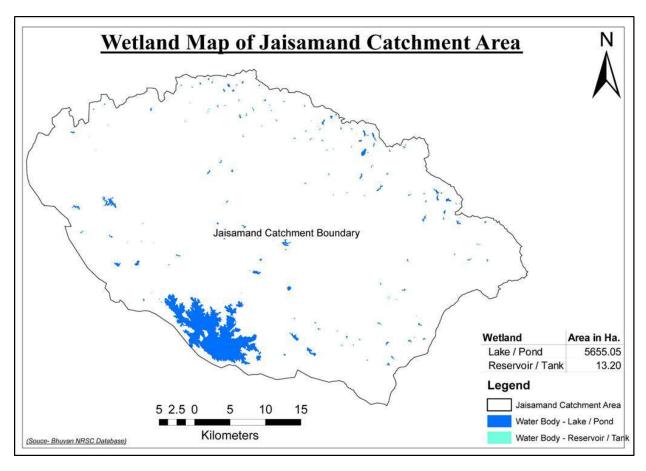
Jaisamand Consortium as a whole will now gear itself up to developed a multi pronged, muli disciplinary approach to giving practical shape to the uderstanding articulated in the September 2022 workshop jointly organised by SPWD, Prayatana Samiti and IELA namely that gram sabha is the smallest unit of governance and Ecosystem is the smallest unit to address Climate Change and hence giving expression to the slogan *think globally*, *act locally*, *act locally spread globally*. Accordingly by the time of the next Consortium meeting in mid February, it is expected that there will be a coherent articulation of the roles and responsibilities of each consortium member.



Drainage map of Jhamri River basin: Map prepared by Surender Singh Rahtore GIS analyst JJVS

Since JJVS is working primarily in the area defined by the drainage line of Jhamri River basin, with the help of IELA it will take the lead in helping to define the ecosystem linkages that need to be studies by the Consortium in order to develop a participatory Action research agenda with the local communities living in Jaismand Catchment area. HVVS has its working area in the remaining upper part of Jharmi river basin and PS has its working area in a small lower part of Jhamri and in Gomti River basin (which will be developed as the involvement of PS in this programme expands). Since PS also has a project from APF to work on the Community Forest Rights claims, it becomes possible to look at the totality of the Forests of Jaismand with the help of the consortium partners. In addition as mentioned above following the lead of PS, it will be possible to develop a strategy for addressing issues related to pasturelands and revenue lands in the region which account for about 54% of the land area in Jhamri and 50% overall.

The drainage map of Jaisamand Catchment area and the map depicting the wetland bodies of jaisamnd Catchment area have also been delienated, the area under wetlands and the length of the drainage area is being calculated and will help prepare the note being prepared for World Wetland Day on 2<sup>nd</sup> Febraury.



Wetland map of Jaisamand Catchment Area: Map prepared by Surender Singh Rathore GIS analyst JJVS

Some case studies related to the wetlands have already been prepared by the members of Jaisamand Catchment Area, IELA, SPWD and SMA, how the lessons from these case studies can be integrated to prepare a more comprehensive perspective for the wetlands of Jaisamand Catchment are will be explored over the next few days and will input into the note being prepared for the ocassion. It has also been suggested that the models and other exhibits prepared by the children of SMA could be used in some way to generate interest among the community living in Jaisamand in general and children in particular.

Since there is a corridor between Baghdarra Nature park and Jaismand wildlife sanctuary which has been studied in depth by a member of IELA, how this combined effort can lead to a more comprehensive approach to understanding man animal conflict in the region will also be explored. Industrial areas fuelled by mining are mostly in the upper regions of Jhamri River basin, At the meeting it was discussed as to how a larger and more comprehensive view can be taken on the impacts of mining which could help put some of the sharper conflicts faced by local communities in the immediate vicinity of the mines in some perspective as also viewed from the larger lens of employment and overall development of the region to which these mines contributed a great deal.