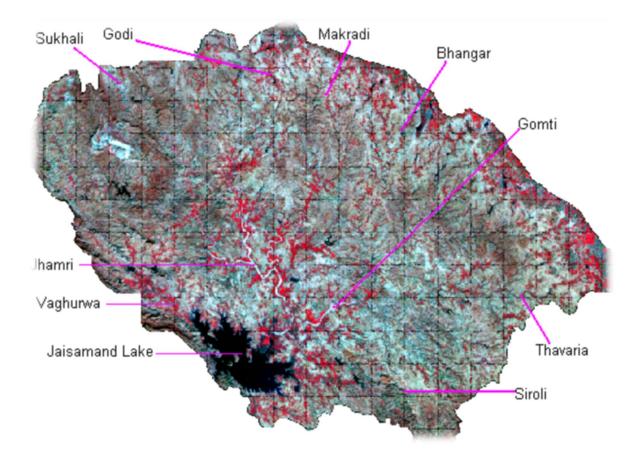
Report

Relevance of Ecosystems approach to Sustainable Development Case Studies of Mahi River Basin, Aravalis and other ecosystems of Rajasthan 12-13th September 2022 Udaipur





Viren Lobo 9460573746



Juned Khan Komal 9928910051



Mohan Dangi 9414343668

Report

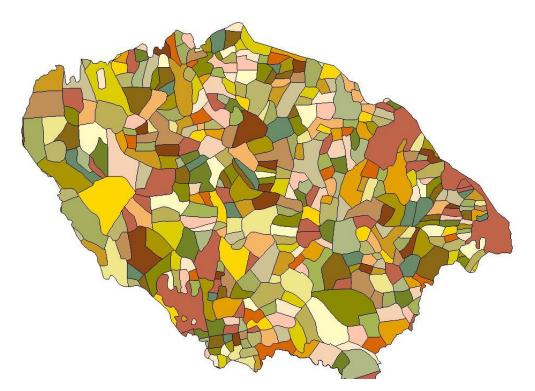
Relevance of Ecosystems approach to Sustainable Development Case Studies of Mahi River Basin, Aravalis and other ecosystems of Rajasthan 12-13th September 2022 Udaipur

In 2020 and a year beyond the world had witnessed an unprecedented spread out of the pandemic which had triggered a chain reaction in every aspect of life and challenged the so called equipped and preprepared arrangements to tackle any extremes. Everyone may have own perspective of resilience to continue but the migrants anywhere in the world still bears the brunt of the lockdowns with greater implications on the habits and habitats.

Apart from the horrifying scenarios of unprecedented moves a hope was still there to survive for long. Returning back to the villages of origin, new possibilities appeared to be practiced, improvise, test and challenge. Traditional Health Healing systems, traditional agriculture and water conservation are some of the practices to promise livelihoods. In the sense of village ecosystems, the possibilities when further examined they proved to recognize the potential of nature and associated practices of the dwellers. Villages once again proved to be the lifeline for the migrants. Apart from this, anthropogenic activities also caused harm to the habitats.

To exemplify the phenomenon "Relevance of Ecosystems approach to Sustainable Development - Case Studies of Mahi River Basin, Aravalis and other ecosystems of Rajasthan" was co-organized by IELA, SPWD and Prayatna Samiti at Udaipur, Rajasthan on 12-13th September 2022.The 2 day workshop was meant to narrow down the global implications of livelihoods on the natural ecosystems and nudge the dependencies of migrants on the services provided by the ecosystems. 12 registered NGOs from Rajasthan participated to share their views on their respective eco-systems and draw out the action plan of work for the communities.

Please download the **Concept Note** for further reference.



Day 1

Introduction of the Participants

The workshop started with the welcome address from Mr. Juned Khan, SPWD. Briefing the purpose of the workshop he said that the relevance of the workshop is to gather new perspectives as we are gaining pace after COVID-19 triggered lockdown being imposed in the state. Different Migrants' categories and other dependent occupants will remain the centre point to address. During the workshop the challenges faced by the occupants in various ecosystems, implications of COVID-19 and their solutions to be discussed and to not leave behind women health and climate change, as stressing issues.

From the part of major NGOs working on livelihoods, Prayatna Samiti introduced itself as one of the organizations working on NRM issues pertaining to common pasture and community forest land. Their role exists in mobilizing the community in attaining secure tenure rights for the common land, which they believe can be best managed under community ownership. The NGO is presently working in 170 villages for securing land rights for the tribal community.

The representatives from FES said they are working to conserve commons (land resources) for which they understand that water, forest and common pasture and traditional knowledge are the resources which need to be maintained for the conservation of NRM. The organization is also working in partnerships with other organizations for the conservation of common property resources.

Seva Mandir was one of the oldest organizations working for protection of common pasture lands and implementation of FRA. They believe that strengthening Gram Sabha can help common land restoration. JJVS representatives had been one of the partners in Jaisamand Consortium led by SPWD and had experience in working streamlining MGNREGA in 11 Gram Panchayat of 5 blocks of Udaipur.

Present among the members was Dr. Sunil Dubey, who is currently working as a Managing Trustee in IELA and is a member of IUCN. He is also leading the CFR for the forest dwellers and engaged in researches related to forest and wildlife. For the conservation of forest dependent occupations, he is engaged in advocacy of Fisherfolk Committees for securing their livelihoods.

Other participants included the members from CASA, Rajasthan Mazdoor Kisan Union and news reporter working on mining issues in Rajasthan.

Coming to the ecosystems, Mr. Viren Lobo, IELA, emphasized on mobilization of Gram Sabha, which he considered to be the smallest unit of democracy in India. In the direction of taking the workshop further he reemphasized the role of Gram Sabha as the speakers would raise the issues of pastoralists, fisherfolks, farmers, tribals and wage labour. He also indicated towards the change in land use patterns and consequent transformation of livelihoods. To address the issue of climate change, he formulated that the landscape is the smallest unit to understand the totality of the issues. For land restoration we must ponder on vegetation enhancement and its relation to traditional knowledge. To work on the solutions we need to engage with Gram Sabha. The models for discussion is based on the understanding of work in Bhima River Basin in Maharashtra. The understanding on issues in Mahi River Basin seek to build on the case study of Jaisamand Catchment of Rajasthan and other parts of the Mahi River Basin.

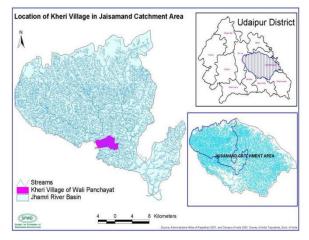
The Aravalis define the Ecosystems of Rajasthan with only 1.7% of the countries water it supports more than 5% population due to the significance of animal husbandry using the countries 10% land resources in the State. Gram Panchayat converge with the help of MGNREGA can play a key role in addressing natural resource degradation by developing community based plans for better use of the local manpower and other resources.

In discussions that followed, the role of Wetlands was highlighted. They play a vital role in securing the livelihoods of the people in any ecosystem and hence cannot be neglected in any plan. There must be renovation of the water ponds in Jaisamand catchment, which are now degraded.

Role of SPWD in Reviving Jaisamand Catchment

Mr. Juned Khan, SPWD explained the role of SPWD in the livelihood issues in Jaisamand catchment. The major interventions he told to the participants, since the inception of SPWD in 1990, were development of pasturelands, common property resources, realizing people's ownership for natural regeneration and impacts on fodder quality, land enhancement and water conservation.

Explaining about the Jaisamand catchment he said that the catchment area occupies 6 blocks and 419 villages. The major challenges in the area are wastelands which need to be recognized and brought under treatment; limited irrigation; grazing land is very less in comparison to other land classes. The soil classification map of the catchment shows presence of highly erodible and loamy soils. Adding to these, the socio economic conditions of the villagers is not good. The maps of drainage line exhibit dendritic drainage pattern. Jhamar Kotra mines are also a threat to the ecosystem. The scoping studies show that there



are495migrant households present in the catchment with 157 migrating to Ahmadabad and Mumbai. There are 5.29 goats tamed per ST family, which is highest among the numbers of all the animals. There are 2.45 buffaloes tamed per OBC family, which is also highest from this class. Similarly, ST households owns 48% of the land class (agriculture and provide pasture).

The issues cropped from the scenario for further interventions leaves commons, pasture, wasteland, biodiversity, Eco-restoration through MGNREGA, strengthening of PRIs, Climate change and River and Sand Mining.

He brought an example of Jaisamand Consortium to address the issues. The approach undertaken was the action research model for implementation for ascertaining the conditions pertaining to land use and cover and waste land identification under Jhamari River basin and associated farming systems. The entire project was based on the development of micro plan and its submission to Gram Panchayat for implementation. The partners HVVS worked on upper catchment, JJVS in middle and Prayatna Samiti in lower. The project, made the use of GIS based mapping technology for bringing transparency.

SPWD had recognized women land rights food security as post pandemic interventions and adaptation techniques and production systems. Studies on common lands of Rajasthan, Gujarat and Maharashtra have also been undertaken to influence policy. Few of the studies to be named are Jaisalmer IWRD for Kaak river and Mainstreaming of millets in Jaisamand. Interventions in Bikaner are some of the new scopes.

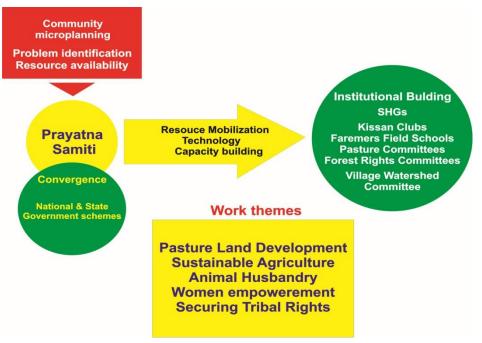
Please download the presentation Role of SPWD in Reviving Jaisamand Catchment for further reference.

Role of Prayatna Samiti in Securing Livelihoods

Under the paradigm of Jaisamand catchment, Prayatna Samiti defined its role as a voluntary organisation working since 1989, committed to the socio-economic development of poor and vulnerable rural communities of Udaipur district located in Southern region of Rajasthan state of India subcontinent. The organisation believes in capacity of rural communities to work for their own welfare. It believes in the collective strength of communities to achieve a just society, free of exploitative forces. The objects of the organization are to attain rural reconstruction, work towards solutions through collaborative group work; promote understanding of, and participation in democratic institutions; develop leadership abilities; facilitate communication among people's organizations and improve situation of basic necessities such as health, education, livelihood and local self-governance. The organisation is working directly with 4,012 people living in 175 villages of 4 blocks of Udaipur district located in Rajasthan state of India. The area lies in Southern part of the state which is marked by undulating terrain comprising of hillocks and steep hills of Aravalli Mountain range.

The strategy encompasses theimplementation of the activities is through the local institutions– SHG, Kissan Club, Farmers' Field School, Pasture Land Management Committee, Forest Right Committee and Village Watershed Committee –facilitated by the organization for micro planning and problem identification. Resource mobilization, technology and capacity building are the basic content to facilitate the local village institutions with Climate Change, women, land rights for forests, agriculture and common pasture, women and MGNREGA as cross-cutting issues. The thematic areas of the organization are Community Management of Commons, Sustainable agriculture, Animal husbandry,Fostering gender equity and Enhancing access to community rights.





Relevance of Ecosystem Approach for Sustainable Development

In the session "Relevance of Ecosystem Approach for Sustainable Development" delivered by Dr. Sunil Dubey, Joint Manging Trustee, IELA and Independent Consultant for Ecosystems, discussed about the ecological importance of Aravali Mountain Range. The importance of Aravali lies in the formation of ecosystems of South Asia. It is an ecotone between far Western and far Southeast and provides conducive environment habitat for the floral and faunal species from these places. Being the home of immense biodiversity, it also regulates temperature and rainfall to form different types of ecosystems on its either side. So, it forms a unique and diverse ecosystem around it.

To value the ecosystems, he said that any ecosystems provide provisioning services including food, fresh water, wood, fibre, biochemicals, genetic resources; regulating services including climatic regulation, water, disease, pollination, water purification and socio-cultural services includingrecreation, research, aesthetics, heritage, spiritual and religious, inspirational. These services aregoverned bythe health of habitats as supportive measures exists in the form of soil formation, nutrient cycle, primary production and habitat.

Fuhrer explaining the relevance of the Aravallis, he presented the Global Importance of the Region in assembling the biodiversity with respect to the Phyto-Geographical Regions of the old world. Drude line intersects the Perso-Arabian and Indo-Malayan elements by running along the Aravallisto southwards till the Gulf of Cambay. "The western or Perso-Arabian elements (Mediterranean, south-west Asian and African) are

dominant over the eastern or Indo-Malayan element in the region west of Aravalis". Aravali Mountain Range determines the ecological features, resources and livelihood by creating Dry Deciduous Forest on the eastern side and Arid Zone or Desert on the eastern side. The Aravalli range is spread in 12.65% area of Rajasthan and influence ecological equilibrium in 29.92% of the state area directly.

He attracted the attention of the participants towards the present forest cover of Rajasthan. The forest plays a vital role in the ecosystem – livelihoods of the forest dwellers, sheltering flora and fauna. Rajasthan represents only 2.33 % of the country's forest cover. The recorded forest area is 9.57% of state's geographical area. According to him, "there are 2,697 plant species (5.5% of India) and approximately 835 animal species (0.92% of India)

present in the mountain range. He also presented the status of forest covers of the respective districts of the state.

Further, explain the relevance. Dr. Dubey said that Rajasthan is a store house of Endemic species of plants. *Euphorbia jodhpurensis, Convolvulus densiflorus* are endemic to the state. Other important species includes Indian Elements, such as, *Rhus mysurensis, Anogeissus pendula,Sarcostemmaacidum*; Eastern element or the Indo Malayan Element – to name the few are *Capparis sepiaria, Leptadaenia reticulata, Adhatodavasica, etc*; Western Element, consisting of 1. Indian Desert Element or the Saharo-Sindian Element existing with the species of *Fagoniacretica, Heliotropiumrariflorum, Lyciumbarbarum*,

etc, 2. Tropical and North African-Indian Desert Element or the Sudano-Rajasthanian Elements existing with the species of *Acacia senegal, Balanites aegyptiaca, Capparis decidua*, etc, 3. Mediterranean-Oriental-Europian Elements existing with the species of *Lathyrus aphaca, Vicia hirsute*, etc.; General Elements.

Angiosperms: 2203 (Sharma & Dubey,2008) Wild Species: 2011 Cultivated: 192 - Algae 280, - Fungi 61, - Bryophytes 89, - Pteridophytes 63, - Gymnosperm 1 (Ephedra foliata) Endemic Plant Species:~ 50 Terrestrial Orchids – 8 Epiphytic Orchids – 6 Parasite Plants – 10 Carnivorous Plants – 5 Medicinal – 157+

- Fishes	146,
- Frogs & Toads	12,
- Crocodiles	2,
- Tortoise & Turtle 11,	
- Lizards	27,
- Snakes	35,
- Birds	510,
- Mammals	92

The unique Physiography of the state categorizes it into 4 type of the ecosystems Desert Ecosystem representing vast desert showing Canal Command Area and Non Command Area and Luni Basin; Aravali Hill Ecosystem featuring Northern Aravali Region, Central Aravali Region and Southern Aravali Region; Eastern Plain Ecosystem available with river basins namely, Banas Basin, Mahi Basin, Banganga Basin, Sahibi Basin, Gambhiri Basin and Barah Basin; Hadoti Plateau and Ravine Ecosystem represented by Chambal Basin and Dang Area.

In the later slides, he presented Summary Data of Animal and Plant Diversity of Rajasthan. There are 2203 species of Angiosperms recoded so far by Sharma & Dubey, 2008 and approximately 50 endemic species. More important, there are more than 157 species of medicinal plants. Among the fauna, there are 146 types of fish, 511 type of birds and 92 types of mammals as recoded by them. Lists of trees of economic importance and medicinal plants were shown to indicate the diverse flora of economic importance. The major concern emerged was the list of threatened species of medicinal plants. As per the assessment of threat status of IUCN Categories and Criteria39 plants identified with immense medicinal values had been determined under the threat status.

Other topics covered by him were: Importance of Wild Plants in Food and Nutrition; Food Supplying Ecosystems; Sacred Grooves and their Importance in the Ecosystem.

Please download the presentation **Relevance of Ecosystem Approach for Sustainable Development** for further reference.

Micro planning and Convergence with MGNREGA

Mr. Hitesh Sharma, representative from HVVS, shared the organization's experience in implementation of community driven micro-plans of NRM through convergence with MGNREGA. The presentation on "Micro planning and Convergence with MGNREGA" dealt with the role of community in identification and planning of land and water conservation based assets as the organization was being engaged in capacity building. The presentation began with the story of Deda village located in Udaipur district, where a bridge was constructed across the water stream. Now, the bridge is a way to transportation and daily movement of the people. It was through the micro planning that the site was prioritized in the shelf of works of MGNREGA.

Their collaboration started with SPWD to work for 11 Gram Panchayat under the project for developing village micro-plans for streamlining NRM in the villages of Jaisamand catchment. The project addressed land and water



degradation through awareness on MGNREGA, identification of the work sites and mapping them through GIS. The plans after community consultations were submitted to respective Gram Panchayat. Government and PRIs had been engaged in awareness camps who further were made familiar with the NRM related works to be taken under MGNREGA. The scheme allocates works in forest land, pasture land, agriculture, livestock and water resources. Thus, it's a key to livelihoods for all the villagers. According to HVVS, the GIS based plans encouraged transparency as the community was involved in identification and types of the works required at most. Several camps had been organized for ascertaining the need of works. The plans, in this way, reached from hamlets to District by passing through the village, Gram Panchayat and Panchayat Samiti. One of the

most important aspects to secure NRs, that is women, was engaged in O1every step of the process – from planning to implementation.

The results of the project had shown ever-increased values of MGNREGA status from 2011 to 2014 in terms of labour work, average wage payment, women participation, labour wage expenditure.

Please download the presentation Microplanning and Convergence with MGNREGA for further reference.

The Paces of Survival in Jaisamand Catchment

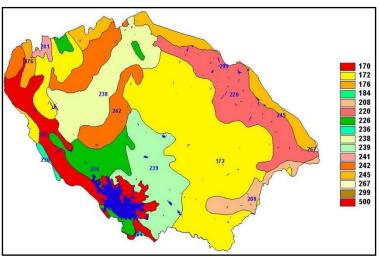
Mr. Darpan Chhabra, Prayatna Samiti <u>presented</u> his views on the topic "The Paces of Survival in Jaisamand Catchment – Our Contribution to the Big Catchment under Paradigms of Agriculture, Soil and Migration". He expressed his views on the progress made by the Jaisamand Consortium so far in enhancing the livelihoods, governed by the agricultural and soil conditions.

For each of the factors he presented the contextual view, interventions and achievements made by the NGO partners. Agriculture, soil and migration are connected factors of the village livelihoods.

Starting with the Agriculture, he presented the status of land categories through the catchment LULC map which depicted that the majority of the land is Forest Deciduous, Barren Unculturable Wasteland, Scrub Land which is located at the ridges and middle slopes and very small portion in the valleys belong to Agriculture Crop Land. This opens the ways of treatment and management of degraded area for regeneration of vegetation and conservation of water by checking excessive run-off. The contribution to the SWC works can make water available for the low lying areas fit for agriculture. However, Farm Field bunds can be constructed in the fields for increasing the soil depth.

In the Semi-Arid Agroc limatic Zone, sampling of types of the crops and production shows that Maize (6.39 q/Ha) is a major crop in Kharif and Wheat (12.48 q/Ha) in Rabi. Summer crops are hardly grown due to scarcity of the water. Sampling in the watershed and river basin projects show that almost 100% families in 480 villages depend upon agriculture who belong to the marginalized and sub-marginalized farmers' categories.

The cropping intensity (before



interventions) of the area was 125%. Greater than 80 m deep wells with 10 to 20 LPM yield. Further, presence of slopped and degraded surface leaves small space for low lying areas fit for agriculture. Less opportunities in agriculture triggers migration.

The interventions to enhance the agriculture sector in the area dealt with the trainings, capacity building and workshops to the local village institutions consisting majority of women on dry-land farming. Securing forest rights and mobilizing flagship schemes had been the advantage to the tribal area. Watershed treatment had been undertaken in most of the projects to enhance the soil moisture content. Techno-traditional measures covered poly mulch and bio-mulch, green house nurseries, raised bed nurseries, mixed vegetable cultivation, supporter technique, trellis, organic manures, distance sowing of cereals and vegetables.

Practicing the above interventions, the major achievements seen area increase in Cropping intensity to 175%, with increase in ground water for cultivation of vegetables, summer crops and mixed cropping and utilization of fallow lands – increase in gross cropping area. Production of cereals raised by 3 q per bigha (0.25 Ha) in a year which ensured food availability for the famers throughout the year from their own field. Due to organic farming measures, which are very low cost, there has been reduction in pest infection and enhancement in morphology. Vegetables and minor millets increased nutritional values and saved incomes for the people along with saving in monthly expenditure. By making the agriculture secure people have become less dependent on loans and elevated standard of life. Agriculture has proved to be the means of sustenance during Corona triggered lockdown, when there was no other job left for the migrants. The resources and capacity building from the organizations had also helped the women beneficiaries to consume and sell the seedlings and vegetables.

Soil pays a vital role in regulating vegetation pattern. The soil structure map of the catchment shows that the major categories of the classification exhibit the features of Moderately shallow, well drained, fine loamy soils on gently sloping plains with loamy surface, moderately to severely, eroded, slightly saline and moderately sodic with Ustochrepts type. The Wasteland map shows the major part is covered by the Scrub Land and Degraded Forest, leaving behind small part of the non-wasteland area. The opportunity again here is to increase the soil moisture and soil depth by developing plantation, water recharge and harvesting structures.

The interventions encompass watershed treatment and climate proofing as the principles of soil water conservation, where micro catchment had been identified for treatment and further management by the people. For securing the tenure rights over common land and maintain equal rights of ownerships and access to the natural resources and their management people's institutions, such as Pasture Land Management Committees, FRCs, SHGs and people's cadres had been formed, which further were engaged in capacity building on acquiring rights for pasture land and forest management by following PESA, Gaon Sabha and Gram Sabha. The local institutions also imposed rules for management of natural resources.

Convergence took place where MGNREGA, Watershed Department and JFM supplemented the pasture development with plantation, land treatment and boundary development. Planning for water conservation and identification of natural resources made transparent as the micro planning was practiced with the people. This further checked corruption and promote good governance.

The achievements for soil counts Increase in vegetative cover and soil moisture content. The sustainable livelihoods came into existence as fodder grew and collected maintaining the equal rights. Gram Panchayat was mobilized to spent the funds on common pasture development along with its monitoring measures. There has been increase in ground water and reduction in soil erosion.

Under the migration factor distress migration was stressed taking place to secure financial resources and to attain standard of life, when there is limited land, less opportunities in livelihoods, condition of drought, water scarcity. Tackling the migration and converting it into the stress free we are engaging the labourer families in the agriculture, livestock, MGNREGA and NGO led projects. This has resulted in the considerable rise in savings, production of crops and animal milk yield. For example, exodus during Corona led lockdown was tapped in MGNREGA.

Reverse migration and Corona

Highlighting the relaxation in distress migration, Mr. Juned Khan, added that the migration which earlier was due to the lack of agriculture, money and land has been now converted into gainful migration. Labours have

now secured their livelihoods in the villages. They are now generating the extra incomes for raising their standard of life by raising money for automobiles, education, medicines, clothes, agriculture machinery, etc. Earlier, the practice was restricted to purchase minimum ration, vegetables and pay the debts of money lenders.

Implementing WASCA through GIS based Planning in Dungarpur

JJVS explained the role of technology in intensive planning for NRM. For this, Mr. Pankaj Paliwal, shared his experience of implementing the WASCA through GIS based planning in Dungarpur district of Rajasthan. The GIS plays a crucial role in planning as it encourage decision making and bring transparency in planning. To derive the GIS plans the organization had organized several meetings and workshops of stakeholders for ascertaining the need of water conservation in the categories of upper ridges, middle slopes, gentle slopes and low lying areas of the catchments.

The major issues in Dungarpur are higher percentage of slope; major slope area covers wasteland and pasture lands which are under degradation; gaps between supply and consumption in the command area; water logging in the command area; lack of grey water management.

For successful implementation of the project, they sought the role of convergence with MGNREGA in 10 blocks of the district, in which 61,377 works had been identified through GIS. 13 thematic maps of water utility areas had



been developed for each block. Another important approach highlighted was the water budgeting of the all the villages of the district, which further provided thought to the need of water conservation in the villages and accepted by the district officials.

To add the plans in the MGNREGA self of works, they had been verified by the respective Line Departments. Adding to the achievements were the special Action Plans of SomKamla Amba Irrigation Project, Rejuvenation of Sanpen River and Forest Restoration. The major plan derived under the slopped land classification categories encompassed 1,088 works of Command Area Development; 12,302 works of DLT and Water Conservation; 18,775 works of Land Development and Water Conservation in Private Land; 20,847 works of Plantation; 3,222 works of RTRWHS; 1,961 works of Rural Sanitation; 2,959 works of Water bodies. Until now ~15,000 works have been sanctioned under the MGNREGA.

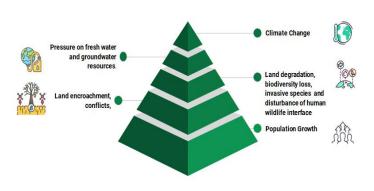
Please download the presentation WASCA in Dungarpur for further reference.

Community Management of Commons through Village Development Cadres and Gram Sabha

To extend the reach of community for better protection of the commons, Dr. G.P.S. Jhala, Sewa Mandir, presented his views on the "Community Management of Commons through Village Development Cadres and Gram Sabha". From his point of view community led planning to be prepared and presented to Gram Sabha for successful implementation of NRM. The model of commons planning to be carried forward from individual to community and last to the government. This ensures the good governance to take place. In the rapidly growing scenario of population and stress over the commons an equilibrium has to be maintained through community led plans.

Another member from the organization, Mr. Kripa Shankar Joshi, spoken about the role of forests in sustaining the livelihoods. He shared his experiences in implementation of the FRA and key concerns after securing the

CFRs. The people's cadres – Van Uttan Samiti – formed by the organization played an important role in organizing Gaon Sabha and filling up the *kulak*, the applications, to secure the forest rights. The *samiti* had been nurtured by SewaMandir at regular basis. They have got 19 CFR applications approved by the forest department in Jharol and Kotra blocks of Udaipur. They have also utilized *Prasashsan Gaon ke Sang Abiyaan* for submitting 111 CFR this year.



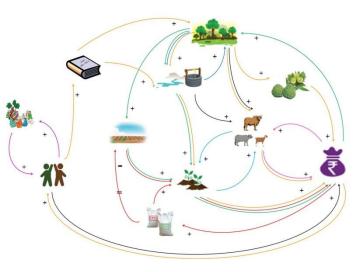
According to him, villagers are not engaged in forest planning even after they have got the CFR. Community is not being empowered and nor permissions have been taken from Gram Sabha for any development in the forests. The action has put the CPR at stake.

Please download the presentation **Community Management of Commons through Village Cadres** for further reference.

Inter dependencies in Community Management of Commons

With their experiences in securing commons for communities, Mr. Girdhari, FES, spoke about the mix of challenges and gaps among the stakeholders leading to ineffective management of commons, which form the huge part of incomes in the villages. According to him, commons form one-third part of the total land area of a

village and effect the greater part of the However, economy. the lack of convergence in planning and action, indicating towards weak capacities to implement policies and generate evidences and inadequate support from public and policy authority becomes threat to the commons. Against such anomalies the opportunities may be in the form of strengthening the coalitions for increasing vote banks through FRA, CFR, MGNREGS, PLPC, GPDP, Jal Jeevan Mission and network at State and National level Structure.



Please download the presentation Interdependencies in Community Management of Commons for further reference.

Challenges faced in Implementation of FRA-1

Mr. Mangi Lal, Aastha raised the concerns on the implementation FRA. He said that the laxity of the administrative body has led to slow progress of the implementation of the FRA. More than 300 CFR applications had been prepared by the Gaon Sabha in their project area. During the follow ups with the departments, it was found that most of the files have been lost. The forest lands have been sanctioned for the construction of schools and community centres. 13 CFRs applications approved in their project area have not been taken under consideration for integrated planning. The proposals of Forest Department have been accepted without community appraisals. The actions have put the question on implementation of FRA.TADA have been approached to counteract the situation. Another concern raised was the declaration of Ecosensitive Zones in the forest areas.

Challenges faced in Implementation of FRA-2

Mr. Jawahar Singh, Prayas, Pratapgarh, briefed about the progress of the organization, especially in context of forest based co-operatives formed for enhancement of livelihoods. The organization has a working base in Sita Mata Abhiyaaran for the conservation of forest. Their role exists in mobilizing people through the FRC for protection of forests. In the year 1997, they implemented JFM for empowering the community. The practice created the example as people patrol the forest of Teak (Saghwan). Further, 6 co-operatives had been formed for processing and selling the NTFP – mahua, honey and tendu patta. Thus, wages of forest dwellers were increased. They have also faced the same problems of losing the claim files, as experienced with Aastha and Sewa Mandir. Now, the organization is strengthening PESA Gaon Sabha. FRA applications are still pending at Panchayat Samiti. Their efforts have challenged construction of government buildings in the forest area. Their prospect is to increase the incomes of the people.

Role of CASA in Leading Management of Pasture Land

Mr. Gopi Chand, CASA defined his organization as solution based organization which mobilizes need based works. It believes that the people must find the solutions for the existing problems so that rights can be ensured for long. The organization has a long experience of engaging people in managing pasture lands through the local plans at Tonk, Jaipur and Ajmer. They enhanced the capacities of people for forming their own rules of protection. To assist the people, a fund was maintained by the people through fodder harvesting. Apart from fodder regeneration, anicuts had been developed for measuring water availability. The pasture land proved to be a good example as a result of management through people. At present, people approach Gram Sabha through their community leaders.

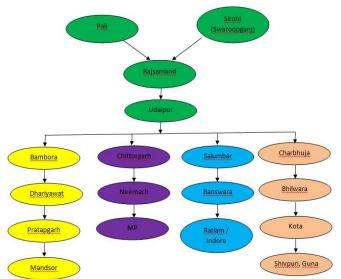
Challenges faced by Pastoralists of Pali – Status of Rabari community in Pali district

Under the surviving relationships with theland, we cannot neglect pastoralists to be one of the most dependent communities thriving in ecosystem. In thisaspect, Mr. Mohan Dangi, PrayatnaSamiiti presented his views on the anthropogenic threats topastoralists in relation with the habitats. According to him, the community migrates covering around 1,500 km stretchand migrates from Pali andSirohi to MP and Maharashtra through Udaipur, Chittaurgarh, Neemach,Salumbar, Vagad, Dhar andJhabua routes. Feeling the unavailability of land and fodder in the surroundings the migration begins after rains and pastoralists return back before remains.

During the entirejourney several hurdles for accessing the fodder and developing halts are reported to be continuously expanding. The main challenges faced by the pastoralists are petty conflicts among themselves; the pasture lands around their residents are under degradation, the prevalence of *Propsopisjuliflora*has not left any grazing option. During the journey they found encroachment in pasture lands. Protection of the forest land bars the livestock to enter inside.

However, in FRA rights to grazing have been mentioned but nobody has claimed them yet. Collector can be approached to issue an order for the grazing.

There have been occurrences of local conflicts pertaining to illegal grazing and intrusion but no cases have been reported against them. This further stopto surface the challenges of the community. There is no purchaser of wool from Pali, which further indicates towards lack of market opportunities of animal products. In MP new land areas have been cultivated due withalternative routes being created.



Interestingly, some of the families have started living in MP to continue with grazing practice. New crops such as soybean is fed to the sheep for increasing the weight. Lack of state policies for the livestock is also a big question in front of community.

State of Fisheries and Fishermen Cooperatives in Rajasthan

Govind Meena from Jaisamand touched a wider issue, pertaining to the fisherfolks in Rajasthan. The research paper "*State of Fisheries and Fishermen Cooperatives in Rajasthan*" by Dr. Sunil Dubey and him, quotes that, "as per government records about 16,500 fishermen are engaged in fisheries related activities with the targeted fish production and the average production of fish resources in the state is 200 kg/Ha". This indicates a good number of families depending on water resources, especially the lakes and dams for their livelihoods. The Department of Fisheries regulates the fisheries and implements the schemes as per the state and central government.

As per the research there are 3 big tanks in Rajasthan available for fish catching – Jaisamand in Udaipur, Kadana in Dungarpur and Mahi in Banswara. The fishermen around the water bodies are registered under the cooperatives, with a name "*MatsyaUtpadakSahakari Samiti*" (Fisheries Producer Cooperative Committee). There is a person positioned as "*Vyavasthapak*" (Manager) with each committee, who keeps monitoring the catch and pays each fisherman accordingly. The contractor procures the fish from the cooperative by paying the decided amount, fixed as per the species, to the cooperative. The manager also establishes the coordination between the fisheries department and the committee. There are 23 village wise committees present at Jaisamand, 17 at Kadana and 18 at Mahi, with around 7,000 members registered under them.

Leading these fisherfolk committees he raised his major concerns on the survival of these people when there were no fisheries and no contractors were available to procure the fish, especially during the time of lockdown. Even in the normal condition, the fishermen are totally dependent on the purchase made by the contractor. In the absence of the contractor, there is no sale of the catch. The department has no other alternatives to sale the fish. There can be an arrangement made by the government by establishing local markets to sale the fish directly in the market. Formation of Fishermen Federation can be another option to raise the budget, develop

strategy and planning for the fisherfolks. Another option can be the formation of regional groups of fishermen, which can be federated at state level. Their training, meetings, orientation and hand holding support can be provided by the experts.

To justify his findings, Dr. Dubey invited the members of Rajasthan Mazdoor Kisan Union and Fishermen Committees to speak about the areas of concern.

Deliberations from the members of Rajasthan Mazdoor Kisan Union and Fishermen Committees

The farmer members from Rajasthan Mazdoor Kisan Union raised their concern over the livelihoods and settlements of tribal communities in the forest area when the forest boundaries are extending the limits of protected area. Though the Community Forest Rights have been issued at several places, the land is leased for extraction. Boundary walls of the forest area have been extended at several places. A discussion between the sangathan and the State Level Committee is necessary to lead the action against the activities.

Fisheries department is also reeling under the issues of administrative lethargy. Mr. Govind Meena, Manager, Fish Producer Cooperative Committee explained the present status of fishermen in and around Jaisamand lake. He told the fact that earlier RAJAS SANGH was dealing in this fish collection and marketing. Tribal fishermen

used to get good wages and other benefits like fisher's insurance, fishing nets and boats. The supervisor was also being paid according to weight of the catch. They used to get the benefits in the lean season also. Under the Saving cum Relief scheme the registered fisher are compensated with 1,500 INR instead of 4,500 INR for the 3 months, out of the 12 months, when there is no fishing practiced. This is because they are asked to pay only 100 INR per month of fishing. Under the scheme the state and



Central government are meant to raise 1,500 INR from each, against 1,500 INR collected from the fisher by the government during the 9 months catch period. In this way the fisherman receives 4,500 INR as a compensation for non-fishing period of 3 months.

Now a days the contract system is under operation. The contractor is an outsider who has brought the fishermen from Bihar and Odisha states. The local fishermen, mostly tribal, lack equipment. There are no boats and fishing nets provided to the fishers by the government, particularly belonging to the tribal communities. They are asked to bear the expenses by themselves. This team of contractor is using the small nets in which all sizes of fishes are being caught. No control mechanism is working over contractor. These outsider fishers are paid their wages on the basis of weight they caught and not on daily basis. No insurance or other facilities being provided by the contractor.

Fish Producer Cooperative Committee of Jaisamand fishers are also fighting for the rights of these outsiders too.

Installation of a new pipeline to transfer the water from Jaisamand to Udaipur is a matter of grave concern. According to him, the immense drafting will leave the lake with less water for survival of the fish. Further, there are no fish seeds supplied by the department this year.



According to Dr. Dubey, the department has released new breeds of fish, which can become threat to the fresh water ecosystem. Thai Magur (*Clariassp.*) is one of such breeds.

Day 2

Challenges in Livelihoods in Jaisalmer

The day 2 continued with the challenges of ecosystems, but with a bit attention to the desert climate scenario on prevailing in western Rajasthan. Mr. Kundan Singh, TISDS, in his oral presentation spoke about the challenging atmosphere of Jaisalmer, where the anthropogenic activities in rampant destroying the livelihoods. However, the communities are still continuing with the traditional water conservation measures as adaptation models.

Jaisalmer presents a desert ecosystem type of climate, where rain water is being harvested through the traditional measures. Following the proper seepage mechanism kharif and rabi crops are sown as normal. The irrigation is sourced from the traditional human made water bodies, *kahdin*. *Khadin* is known to provide chemical free water. The disappointing fact is that rapid implementation of the watershed projects and Border Area Development Program have destroyed the catchment and ponds. Renewable energy projects –



solar and wind – have occupied the land area and have extracted heavy amount of ground water. Due to stone mining *beri* have come under threat. These types of anthropogenic activities are causing depletion of the livelihoods.

Explaining the wider scene of the area under threat Mr. Juned Khan, through the photographs, highlighted the degraded areas and water deficiency scenario created due to proliferation of solar panel and wind mill projects. A huge amount of water is consumed to wash the solar panels for increasing their efficiency. Tourism is also exploiting the environment.

The greater implications of the degradation, as discussed, are land in Pratapagarh is becoming barren which is causing a fall in the number of Lesser



floricans. Grass lands of tall grasses are becoming vanished which is looming threats to survival of Godawan. Adding to the worries, is the implementation of MGNREGA for the development of infrastructure.

Few of the models suggested by the SPWD in Jaisalmer were the construction of cascading earthen tanks for effective recharge and harvesting and draining water falling down the ground, collected due to washing of solar panels, to the agriculture fields. Moreover, it is the time to raise collective voices in front of the administration from farmers, pastoralists, fishermen, tribal from their respective habitats to rejuvenate the natural aspects of the ecosystems.

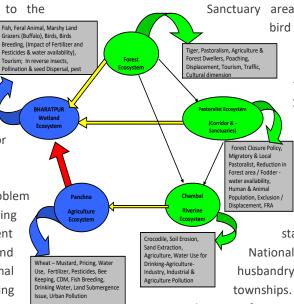
Adaptation to Change in Interlinked Cultivated and Wetland Ecosystem

To further discuss the threats to the major ecosystems Mr. Juned Khan shared the key highlights of the study "Adaptation to change in interlinked cultivated and wetland ecosystem: a study of five ecosystems around Bharatpur". He said that the Ghana Bird Sanctuary, located in Bharatpur, is a heritage site of international importance. The rivers in the area restricts the saline water to rise up. As a result of which a swamp is created from the agriculture. Gradually, due to high population the saline area is increasing.

Keoladeo came into the limelight in 2004, after the refusal of the farmers benefiting from irrigation from

Panchna Dam to send water to the conflict centered around the benefiting from irrigation issue of drinking water to in a short period of 4-5 years burgeoned to embrace over stakeholders including Karauli sanctuary and the Alligator Chambal.

Each proposed solution to the problem number of stakeholders, intensifying conflict between the different dimensions include sanctuaries and types, agriculture, animal issues for the neighboring related to quality of water including



Sanctuary area. At that time, the bird sanctuary, farmers from Panchna and the Bharatpur. However, the conflict has 10 different types of town, Kailadevi sanctuary in the

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 the type of water that can breed fish for

the birds of the sanctuary, breakdown of a traditional method of harvesting water on the Banganga which has not only damaged agriculture, but also led to a breakdown of the traditional breeding ground for birds in the wet lands surrounding Bharatpur. The tourism dimension related to the bird sanctuary and the vanishing Siberian crane all form part of the tapestry.

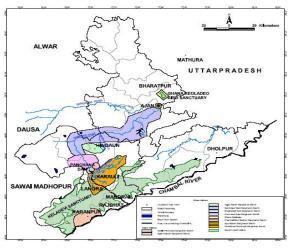
The region is of critical importance for Rajasthan due to it being the outlet of all East flowing rivers in to the Ganga via Chambal. Being low lying area, the region was initially water logged, but due to the efforts of Raja Suraj Mal a series of small dams were constructed, which trained the rivers and created wet lands in the rainy season on one hand and facilitated agriculture in Rabi season. The change in the ecology resulted in the region becoming a suitable nesting ground for the migrating Siberian birds. After Independence, agriculture in the region has been transformed, with the large scale production of mustard from the region. Milk production in Bharatpur went down due to the scarcity of fodder created as a result. Urbanization and water use intensification has caused a change in the issues around Bharatpur. Where once Ajan Dam etc. was constructed to save Bharatpur from flooding, now Bharatpur starves for even drinking water. On the other hand, Karauli which once hosted vast herds of migratory cattle now faces the unenviable situation as to what to do with its own cattle. Vast hordes migrate to UP along with a good section of the resident population.

Government has gone for quick technology fix solutions, promising water to be lifted from Chambal and also to bring water via pipe line from Yamuna. This has caused the people from those regions to go up in arms on the one hand while on the other failing to address the ecological questions related to adequate water availability.

Panchna Dam

Construction of Panchana dam was started in 1978 – 79 and completed in 2004 – 05 on the confluence of River Bhadrawati, River Berkheda, River Ataki, River Bhesawat and River Manchi. Gambhiri River Starts from Panchna dam and flows down to almost 120 Km to Ajan Dam.

The feasibility report for Panchna shows the proposed cropping pattern for Rabi season. It has been proposed that through different ways, they will encourage people to grow those crops which require less water. E.g. they will reduce the wheat area and will increase Mustard by 18%. But in practice it has not happened on the ground. Instead of Mustard, wheat has gone up by 20% involving an increase of 38% from what was proposed in the scheme; whereas the area under the remaining crops including Mustard have been reduced. Instead of reducing the demand for water, water intensification has increased by 38%.



Farmers of Karauli found themselves in a situation where they were not in a position to allow the Panchana dam water to be released for other usages. That included provision of water to Keoladeo bird sanctuary.

The Chambal Panchna Dam Lift Irrigation Project

It is planned in the first stage to lift 1000 mcft water from Chambal near Rajghat – Mandrial. Water shall be pumped through two pipe lines (each of 1200 mm dia.) for 18 km uptoLangra village, then water will flow in Bhadrawati River for 15 km to the proposed Chulli-Deh reservoir storage having a capacity of 5000 mcft. Remaining 500 mcft water shall be allowed to flow by gravity for 12 km to Panchna dam. From Panchana dam 500mcft of water shall be pumped through pipeline (1200 mm dia.) for 8.74 kms to submergence of Jaggar dam. It is also proposed to provide irrigation facilities to the command of 13 villages in Rabi Season.

The conflict came into the limelight in 2004 when Keoladeo Bird sanctuary did not get water after the refusal of farmers benefiting from irrigation from Panchna Dam to send water to the Sanctuary area. At that time the conflict centered around the bird sanctuary, farmers benefiting from irrigation from Panchna and the issue of drinking water to Bharatpur. However, in a short period of 4-5 years the conflict has burgeoned to embrace over 10 different types of stakeholders including Karauli, Kailadevi sanctuary and the Alligator sanctuary in Chambal. Each proposed solution to the problem adding to the number of stakeholders and intensifying the nature of conflict between the different stakeholders.

The conflict in this region has started with the water demand from Keoladeo Bird Sanctuary. The parks basic ecological requirement is 9.5 Mm³ (350 mcft). In normal rainfall years the sanctuary gets 8.15Mm³ water from Panchna dam. Additional requirement is met from precipitation on the open hand and through an increase in the catchment runoff in Gambhiri River. After three consecutive low rainfall years, conflicts built up in August 2004. The agitation was started when the committee headed by the Chief Minister gave the decision to release 8.15Mm³ water from Panchna. The dam that time had storage of 35.7Mm³. The farmers from the command area protested against this decision. The dam was constructed specially for irrigation purpose with the help of World Bank and named as "Panchna Baandh Sinchai Yojna".

The government reversed the previous decision. This was not the end of the problem rather it ignited a bigger problem in the region. Many pro park people including Tourism and Wildlife Society of India (TWSI) started protesting against the decision and demanding the release of water. The legislators also formed a Green lobby group for conservation of environment and wildlife in the state. Bharatpur hotel business people, Rickshaw pullers, local guides, tour operators and the staff of the sanctuary also supported the protest. TWSI also filed a petition on this issue. They suggested that Chambal water may be supplied through pipeline to Bharatpur for drinking purpose. The moment Chambal plan was discussed People from all parts of the districts started agitating and came out with their own demands. The matter is pending with the Central Empowered Committee of Supreme Court.

The Issues

These stake holders raise different issues. These issues are linked not only with water but other socio-culturaleconomic and ecological issues are also linked with them.

The Caste Factor:

This whole region is facing the problem of caste clashes. Gujjar caste is dominant in the Panchana Gudla area. They are raising their issues on reservation aspect too. This is not only linked with water and reservation but also linked with their involvement in Army services. Almost 20,000 to 30,000 people are serving to Indian Army and almost 6000 people have retired from the army. Therefore, to deal with the situation in the present scenario is not so easy. The moment Gujjar raised reservation issue under ST quota; Tribal community of this area (up to Dausa) came in confrontation with them. The Tribals are dominating in the Agarri Dam area and they have also demanded for irrigation water when Jat Community in Jaggar dam area have benefited under the Chambal Water scheme.

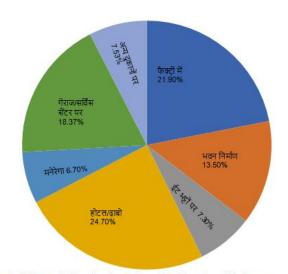
Forest Department issue:

At national level under the chairmanship of Prime Minister a committee was formed to look at the issue of Tiger protection and habitation. One of the Committee's recommendations was that there should be a contiguous patch for Tiger conservation. The Forests Department has identified this area to be from Sariska to Ranthambore up to Keladevi Sanctuary. Keladevi sanctuary will be linked with Ranhambore in Sawai Madhopur, through one corridor with Band Baretha sanctuary in Bharatpur, and on other side corridor to Van Vihar in Dholpur. It will also be linked with Kunoh National Park of Madhya Pradesh. The whole area falls into Tropical Dry Deciduous Forest (Dhak forest). The FD logic is that if you are protecting the top of the pyramid the whole small species will be protected own its own. The forest department has started working on this aspect. They have suggested removing people from the forest area. There are 42 villages with in Keladevi Sanctuary and 4 in Ranthambore. The department is ready to remove these villages but does not have the plan to resettle them though the compensation amount has been fixed i.e, 10, 00,000 INR. People had started agitating against this action. The Supreme Court has ordered to the FD that first R & R (Resettlement and Rehabilitation) plan should be prepared and people should be benefited by the plan than only the removal will start.

Please download the presentation Adaptation to Change in Ecosystem for further reference.

Bringing Forward the Post Lockdown Challenges and Status of Children in Rural Areas

Considering child abuse an inseparable part of the any communities the workshop touched another facet of concern from the angle of child rights. Dr. Shailendra Pandya, GSS, through his research conducted during the time of exodus at the time of pandemic. In his research "Bringing forward the post lock down challenges and status of Children in Rural Areas", he tried to gather the information on child abuse, their occupations and pressures causing to adopt labour practices. The purpose of the research was to ascertain the problems and challenges faced by the child labourers affected by the lockdown. A total of 891 children had been survey from Udaipur and



children had been survey from Udaipur and **beac** H = भवन निर्माण = ईट भट्टो पर **e** होटत/दावो **e** मनेरेगा = गेराज/सर्विस सेंटर पर **e** अन्य दुकानों पर Pratapgarh. The findings showed that 24% of them were going to school and rest of the 76% were not going to the schools. A majority of them were found engaged as permanent labour in hotel, food joints, factory and garage service centres. The main reasons behind the labour were family pressures, low incomes and bad economic conditions. Concluding, the future generation to be provided conducive environment for health and growth. The NGOs need to notice any type of child labour at the work sites they came across. Also, in the cases of forest rights several cases of woman violation have been observed. Foresters unnecessary book petty cases against the women who are found to use the forest based resources. Under a government scheme, Palanhar Yojana, there is a facility to provide monthly incomes to the poor families to compensate the child labour.

Please download the presentation Post Lockdown Challenges and Status of Children for further reference.

Forest Management Plan

In their second session of the workshop members from Sewa Mandir, presented the overview of the Forest Management Plan to be made functional by the Forest Protection Committees after they have secured the CFR in 17 villages. In the absence of any forest management plan to be followed after getting CFR the organization had prepared a management plan for conservation activities in the forest area, which they shared with the participants.

The plan was the result of the community meetings, transect walks and other PRA exercises to gather the information pertaining to habits and habitats. The main content includes the essential activities to conserve biodiversity and traditional knowledge by segregating the need of resources as per location, customary values of the forest, documentation and conservation of medicinal plants, tubers, such as wild turmeric and other NTFP, protection and conservation of forest dependent agriculture and livestock. The plan laid down the riles of community and the administration under its 5 year time of implementation.

The main challenges pointed out for current management observed were no management of stipend for the FRC and FPC; areas of FRCs are overlapping; plans of CFRs are not simplified for understanding; no guidelines are issued by the department to further manage the forest after securing the land; limited capacities of the Gaon Sabha and women to secure land rights and initiate mobilization.

Please download the sample Forest Management Plan presentation for further reference.

Ecological Aspects of the Aravalis and Mahi River Basin

Dr. Satish Sharma, Forest Department (Retd. ACF), in his presentation talked about the "Ecological Aspects of the Aravalis and Mahi River Basin" with respect to zonal uniqueness of such ecosystem to South Asia. He said that Aravali formation is one of the oldest mountain ranges which is about 35 crore years old. It is formed of Bundelkhand gneiss and is an example of folded mountains.

Aravali plays an important role in creating the ecosystems in Rajasthan. Northern Aravalli is devoid of soil. Thus, forms Dry thorny and dry-deciduous forest. Similarly, to the northern part Central Aravalli forms Dry thorny and dry-deciduous forest. The Southern Aravali having varying depth of soil present on slopes forms Dry-deciduous and Semi-evergreen forests. The part exhibits dry bamboo break and teak forest along with many other southern elements. The Sageti forest division (Gogunda) and Naal Forest in this part provides conditions similar to Western Ghat Forests. Due to suitable environment present in southern Rajasthan the Teak is restricted to Sageti division only. The main forests categories created by the Aravalli in Rajasthan are Southern tropical dry-deciduous forest; Northern tropical dry-deciduous forest; Northern tropical thorny forest; Southern sub-tropical broad-leaved hill forest. Similarly, the main grasslands created are D-N Grassland (main type) and D-C-L Grassland (towards western edge).

Ecosystem	Extent	Sub-types
Desert Ecosystem	West of Aravalis	i) Canal Command Areaii) Non-command Areaiii) Luni Basin
Aravalli Hill Ecosystem	Alwar, Jaipur, Dausa, Sikar, jhunjhunu, Ajmer, Bhilwara, Tonk, Nagaur, Udaipur, Rajsamand, Sirohi, Banswara, Dungarpur, Chittorgarh, Pali, Jalore	i) Northern Aravallis ii) Central Aravallis iii) Southern Aravallis
Eastern Plain Ecosystem	East of Aravalis	 i) Banas Basin ii) Mahi Basin iii) Banganga Basin iv) Sahibi Basin v) Gambhiri Basin vi) Barah Basin
Hadoti Plateau and Riverine Ecosystem	Kota, Baran, Dholpur, Bundi, Jhalawar, Sawai Madhopur	i) Chambal Basin ii) Dang Area

Importance of Aravalis lies in checking eastward extension of desert, origin site of rivers, influence rainfall pattern and enrich biodiversity. The concerns raised by him mainly consisted of destruction of riparian forest, destruction of ravinous banks, exploitation of water; degradation of catchment area; over fishing, mostly at the time of gestation period, siltation of ponds and change in bank, span and island ecology. The solution to these problems can be the catchment protection and restoration, bank protection and riparian forest restoration, imposing check on over-fishing.

Please download the presentation **Ecological Aspects of the Aravallis** for further reference.

Patterns and Paradigm of Mining in Lockdown

Apart from the constructive measures the big catchment areas are severely hit by mining. Mining pertaining to sand, stone and different ores are prevalent in different parts of Rajasthan. The activity not only disturbs the catchment but also has serious implications on the health of the workers. Not only this, there are several issues of safety, wages and other facilities which do not reach properly and in time to the workers.

To highlight the issue Mr. Tarun Kanti Bose, a freelance correspondent, briefed about the findings of his extensive research related to patterns and paradigm of mining in the lockdown period in the year 2020. Through his research paper he brought out how the mining labour was affected during the lockdown. When the work resumed in April 2020, hundreds of labours were reported to be killed due to lack of protection measures and safety gears. 32,000 mining leases have been provided in Rajasthan. 30 lakh labourers were tapped in abandoned mines.

Operation of illegal mines had also been reported from the state, from where much of the workers have not received the payment. Most of the labourers belong to the local village areas. They are not even ensured for the payment. Children and women are also engaged in mining. There is no money spent from the District Mineral Foundation Trust, which exists with the balance of 1,073 crore INR. Moreover, revenue collected during the lockdown have not been questioned. There is no money allocation for the welfare schemes for the workers.

According to the Home Ministry the works had been restarted in the mines. However, the payment had not been made to most of the labourers. They are still facing the shortage of money. Due to improper health facilities and precautions the number of silicosis patients increased, which also remained unattended during lockdown. Altogether, the condition of mining workers became worst during lockdown.

The discussions on FRA continued after the presentation. JFM recognized the role of community in planning and implementation. Further, there must be the scope of securing benefits of women and children under FRA. Expanding tourism industry is one of the major threats to the forests.

Deliberation of Farmers from Mukundra Hill National Park

Mr. Kailash Chandra, a community leader from 14 villages of Mukundra Hill National Park unfolded the miserable experiences felt at the time of eviction from the national park. They had not been provided any compensation against the rehabilitation. They were restricted from open grazing. In the few cases, forged cases have been registered against tree felling and penalties have been imposed. According to him, no NTCA meetings have organized until now. In total, the national park has not kept its promises of compensation, so far.

Towards Conclusion

Mr. Viren Lobo delivered the concluding remarks on the 2 day workshop. He reiterated that there is less agriculture land left in Rajasthan. The opportunity can be seen with the implementation of FRA. The future to be foreseen in the form of nurturing local cadres and formation of their networks. He further said that Prayatna Samiti, SPWD and FES are the part of ILC, that can be the platform for raising collaborations in towards conservation. We can also focus on work on studies emerging from different work areas, which will be helpful in demonstrating the experiences and potential available with the organizations.

Mr. Juned Khan delivered the vote of thanks and reiterated the intention of building the interface among the government, organizations and community for fund raising and mobilization as there appears the dearth of funding for the NGOs, which is crucial for their existence. List of participants

S. No.	Nameof the participant	Organization
1.	TarunKanti Bose	ABMKSS, Delhi
2.	Bhagwati Lal	Jagran Kan Vikas Samiti, Udaipur
3.	Govind Lal Meena	IELA, Jaisalmer
4.	Ratan Lal	Uparmal Kisan Mazdoor Shakti Sangathan, Bhilwara
5.	Babu Lal Meena	Uparmal Kisan Mazdoor Shakti Sangathan, Bhilwara
6.	Kajrod	Uparmal Kisan Mazdoor Shakti Sangathan, Bhilwara
7.	Dr. GPS Jhala	Sewa Mandir, Udaipur
8.	Ajay Patel	FES, Bhilwara
9.	Girdhari Lal Verma	FES, Udaipur
10.	Kripa Shankar Joshi	Sewa Mandir, Udaipur
11.	Manisha Eka	CASA, Udaipur
12.	Mohan Dangi	Prayatna Samiti, Udaipur
13.	Darpan Chhabra	Prayatna Samiti, Udaipur
14.	Hitesh Sharma	HVVS, Udaipur
15.	Viren Lobo	IELA, Udaipur
16.	Jawhar Singh	Prayas, Pratapgarh
17.	Juned Khan	SPWD, Udaipur
18.	Nana Lal Garasiya	Rajasthan Mazdoor Kisan Union, Jhadol
19.	Mangi Lal Gurjar	Aastha Sanstha, Udaipur
20.	Pankaj Paliwal	Jagran Kan Vikas Samiti, Udaipur
21.	Narendra Jain	Sewa Mandir, Udaipur
22.	Suniil Dubey	IELA, Udaipur
21.	Gopi Lal Rao	CASA, Udaipur
22.	Balchandra	Matsya Utpadak Sahakari Samiti, Banswara
23.	Bheru Lal	Matsya Utpadak Sahakari Samiti, Nimbaswada
24.	Kailash	Rajasthan Mazdoor Kisan Union
25.	Nanu Ram	Rajasthan Mazdoor Kisan Union
26.	Ladu Ram	Rajasthan Mazdoor Kisan Union
27.	Raunak Shah	Sewa Mandir, Udaipur
28.	Kundan Singh	TISDS
29.	Nitin Paliwal	GSS, Udaipur
30.	Dr. Shailendra Pandaya	GSS, Udaipur
31.	Shailendra Tiwari	MSMMT, Udaipur
32.	Dr. Satish Kumar Sharma	FES, Udaipur