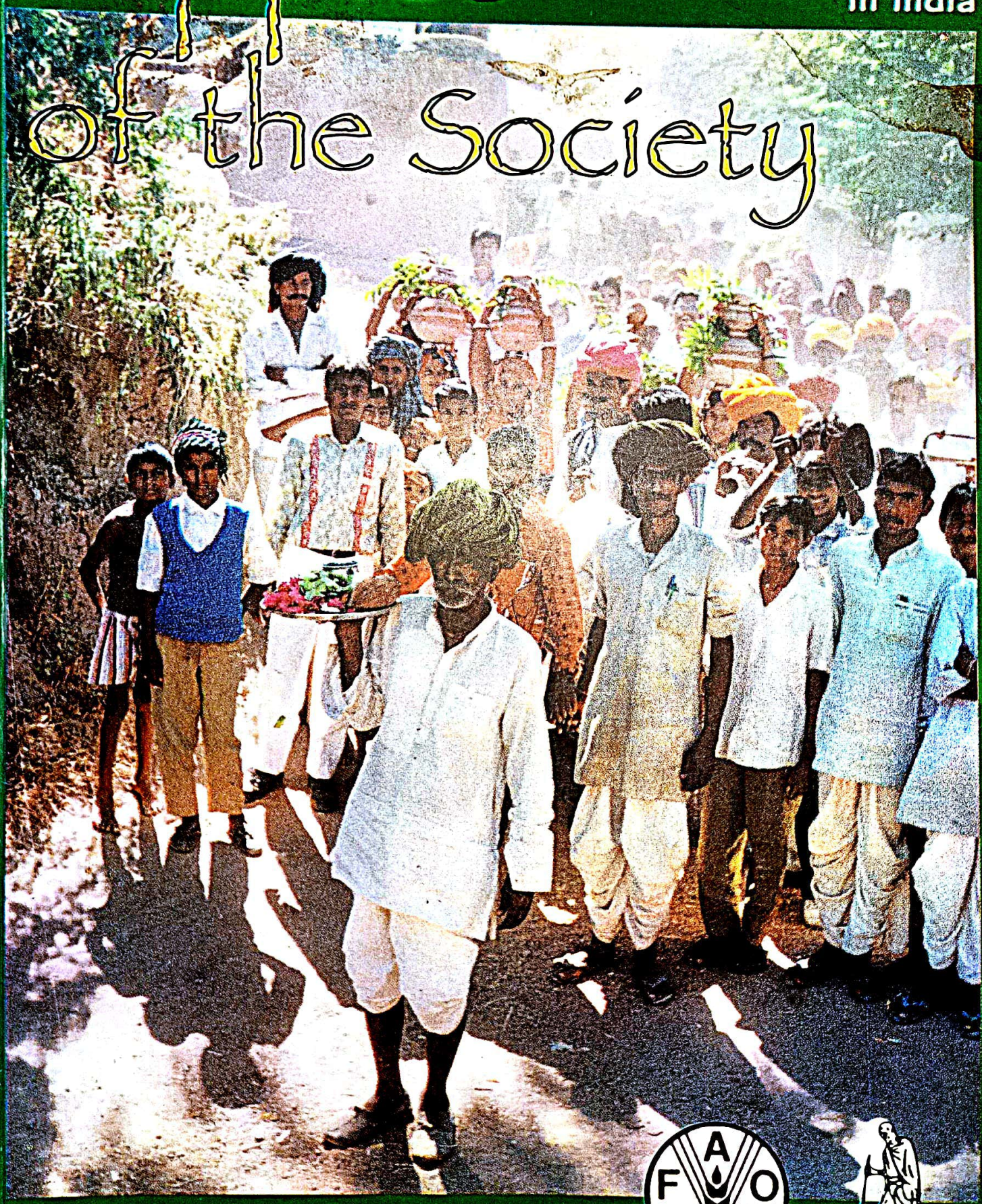
Ripples of the Society

People's movements in watershed development in India



PWMTA and FARM Programme

Ripples of the Society

People's Movements in Watershed Development in India

Text : Sheena, Gandhi Peace Foundation
Editor : Prem N. Sharma, FAO

Analysis

Case-Studies

Tropical Rainfed Areas : Rajasthan

Indian Himalayas : Uttar Pradesh hills

Lapodia
from dream to reality

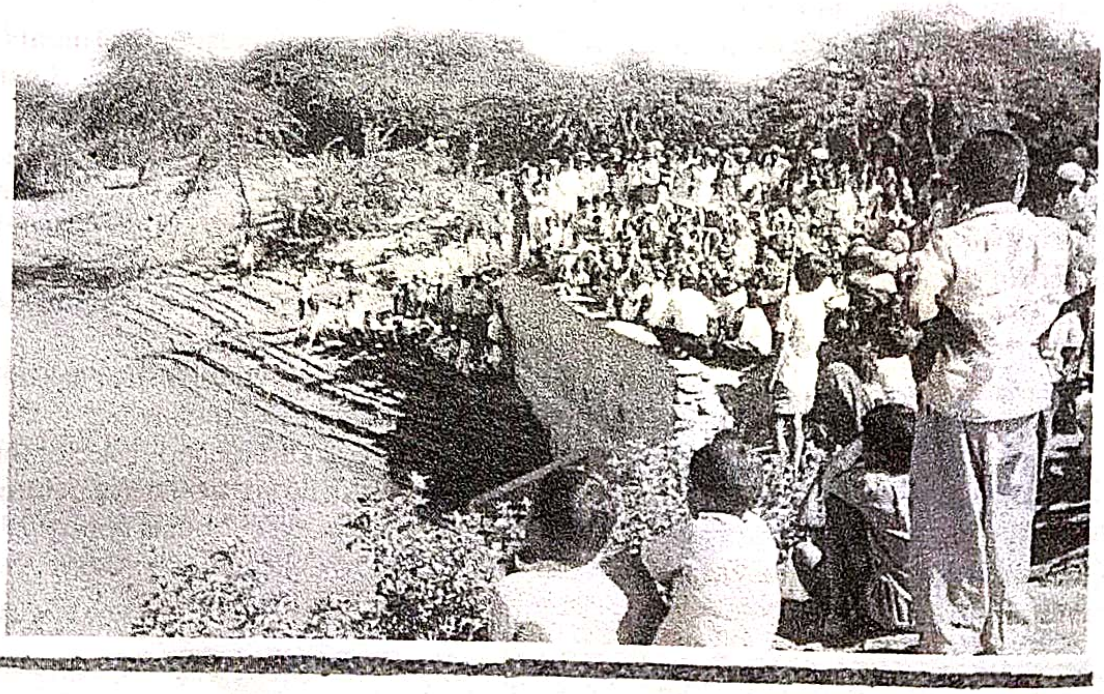
The path to Lapodia is dusty, but the eyes are not blinded by the dust raised from a barren landscape. They instead feast on the green environs of the 'Gochar Bhumi' (pasture land), the blue shimmer of 'Ana Sagar', spread out on the left flank of the village and the heart of the dwellings, pumped by the waters of 'Dev Sagar' and 'Phool Sagar'. The life of the rural society lies anchored in the lifeline of adequate and secure water sources. Lapodia is no different!

The small dwelling of Lapodia, seems firmly nestled in the midst of the rippling waters of its johads and the abundance of its lands. But life in Lapodia has seen a sea of change. Not long ago it was like many of the obscure villages, lost in the maze of our numbered ,statistical and geographical maps. But the efforts of Laxman Singhji and his fellow villagers, rose like the flight of the phoenix from its ashen remains, to restore life and prosperity in their small village of Lapodia.

It is difficult, to test one's own philosophy at home but a battle won at home creates avenues of change and a rippling effect, that takes its success onto directions far and wide.

The family of Laxman Singhji had been home to Lapodia for generations. But the post-independence, modern paradigm of development and industrialisation had left out many remote rural corners of the country, which could not be brought under the yoke of the green revolution, sweeping the irrigated lands of many parts in the northern plains. Lapodia was but a poor candidate tucked away in the semi-arid zone of Rajasthan, devoid of the network of irrigation canals fed on the waters

...Because we belong to this talaab



of the perennial rivers in the northern plains of the country. Surviving on rainfed farming , on not so fertile deemed lands, it had escaped the notice and concern of our policy makers. By early '70's, life in Lapodia had degraded, was degrading and heading from bad to worse. To check this degrading environment and apply the soothing balm of concern, Laxman Singhji started his humble healing efforts, in his home ground.

Laxman Singhji started with creating an environment of mutual concern, understanding and fraternity at the village level. By late '70's, the government records described Lapodia, as a village of a 189 families in drought prone area, with barren, highly saline landscapes, denuded pasture lands and agriculture lands capable of producing only one, low-value monsoon crop (Barani or rainfed, kharif harvest). The advent of summer months, meant 40% migration of the human population to the cities, in search of employment with 75% of livestock migration to the nearby towns in Madhya Pradesh and Uttar Pradesh, due to the lack of adequate fodder for the cattle in Lapodia or in the neighbouring villages.

Laxman Singhiji remembered the days of his childhool when the gochar bhumi of Lapodia was thickly wooded, almost like a dense forest under the canopy of indigenous species of trees and foliage. The awesome 'Peepal' (holy Fig tree), 'Barh' (Banyan), 'Neem' (Margosa), 'Siris' (Alibezzia lebbek), 'Dhak' (Butea frondosa), 'Shishim' (Dalbergia sissoo), 'Farash' (Tamarix articulata), 'Imli' (Tamarind), clusters of 'Desi Babool' (native Acacia, Acacia arabica) 'Khair' (Acacia catechu stood tall, over the lush outgrowth of thorny bushes of 'Kair' (Caper plant, capparis decidua), 'Ber' (Zizyphus jujuba), in the lower rungs, giving way to succalent grasses like the 'Doob', the 'Suryawala', the 'Chharnawala'; spread out like a green carpet on the dusty face of the land.

So much so, that if one had to travel across, it became a kind of a game. Especially for the children, who were adept at a swinging match ! Hopping onto one tree at the rear end, swinging on from one branch to the next, the entire distance was covered not on foot but in the air. Almost like monkeys in paradise!

The dynamics of soil and water that produced such veritable, mosaic of vegetation, was in true keeping with the aesthetics of nature. The land which may appear inhospitable to an unknown eye, is in essence a storehouse of the splendour of nature that is hospitable and a keen host to varied flora, endemic to its own region and geography. The rich and varied bio-diversity of even a semi-arid zone can shame even the most prejudiced mind. Unique to its habitat but in no way lacking ! For the characteristic of dryland environment is not so much limited water availability as it is the variability of water availability. And even a small village like Lapodia is symbolic of this variability.

The migration of both cattle and people, outside the safe havens of their homes was linked to their livelihood. The native agro-pastoral society, needed a strong agricultural and vegetative resource base to survive within its habitat. Adequate harvests for people and enough fodder for the cattle all the year round, formed the cornerstone of their well-being. But the state of the barren, degraded and encroached pasture land, could barely supply the cattle with fodder in the monsoon and pre-winter months. The highly silted, old talaab of the village, was in no condition to store and conserve the rainwater which soon drained off towards the monsoon stream or nallah running parallel to the village lands, at the lowlying

feet of Lapodia. This old talaab, on the drainage line of the Lapodia watershed, had been constructed in earlier times, in keeping with its natural geographical gradient, serving as the ideal site for johad. But the intervening years had changed the face of the land. Thus, both these problems were directly linked to the basic need of land and water conservation.

The decade long interaction of Laxman Singhji, in his own homeground and the concerted efforts of the Gram Vikas Nav Yuvak Mandal got their first foothold in '90, with the formation of the Gram Sabha of Lapodia. To ensure the participaction, interaction and involvement of the entire village, in regenerating their own resources and life support systems. This council of village elders had eleven members; accepted, respected and unanimously recognised by the people. Kalu Dada has emerged as a core member of this council and is still much at the helm of all the affairs of the council. The responsibility of ensuring the cooperation, the solidarity, the dynamism of community work rests with the council and efforts to regenerate the lost vegetative cover of the gochar bhumi and restore the water in the old talaab were soon initiated.

A strict code of conduct and regulations, were unanimously decided and enforced by the people. Illegal felling and cutting of trees on the pasture land was to be immediatelly curtailed. If an individual was caught stealing or cutting any tree, the felled wood was to be deposited with the Gram Sabha. In lieu of the felled tree, the culprit was expected to plant 5 trees and deposit 5kg of grain as a penalty with the Gram Sabha. Besides rendering a written apology, promising to never repeat the offence. Hunting was totally banned on the pasture lands and an initial earthen walling, on 25 hectares of pasture land was undertaken, to define the protected boundary of the grounds. Simultaneously, work began on repairing the old talaab.

Laxman Singh

The initial task was of strengthening the weakened 'Paal' (earthen embankment) of the talaab and resusticating it off the excess silt and soil in the talaab bed, to increase the water storing capacity of the talaab, to facilitate a better ground water recharge and increase the water levels in the wells of the village, located in the downstream of the talaab. 50% of the cost, of desilting the talaab bed and repiring the paal of the talaab and raising the earthen boundary wall of the pasture land, was contributed in the shape of physical labour, 'Shramdaan' (voluntary labour) of the people. The mud work was measured in the digging out of 'Chaukri', a uniform square measure of 11ft. by 11ft. with a depth of 1ft., equivalent to almost 110 sq. ft. of mudwork. On an average the digging out of 2 chaukris equated with the labour of 1 manday, equated to the labour standardised for earning the government stipulated dailywage. But the motive, was not on providing employment in exchange of monetary renumeration. Most of the payments were made in kind. 8 kgs. of grain (wheat) was allocated for one day's labour after deducting 50% share of shramdaan, from the total cost. Also the shramdaan of each household, ensured the iopping rights for 3 trees on the pasture land for each household.

Shramdaan is the labour of love, of affection and respect for one's immediate environment. The toil on one's land, is not determined by the money earned in exhange, but is an act of belief, of service.This has been part of our tradition, our culture, to conserve and respect the environment, the habitat one interacted with.

With the washing away, of the fertile soil from the face of the fields of the people, the beliefs, traditions and ideologies of the people had also lost ground. Uprooted in the onslaught of the changing times. But just as the moisture in land, makes way for the sprouting of new shoots. So too, is the human mind and the spirit that flourishes with the hope and vision for a better tomorrow.

For monitoring, planning and executing the work, fortnightly or monthly meetings of the Gram Sabha were activated. Till today, the village council conducts meetings every 'Amavasya' (no moon night) and 'Purnima' (full moon night of the month). And within a year, the labour of the people bore fruit. The fodder output doubled in the next year itself and 50% of the forced migration of the pastoral communities with their livestock, to the neighbouring areas in Madhya Pradesh and Uttar Pradesh could be avoided. This also greatly eased out the irrigation conflicts among the people and the same people who had earlier opposed the restrictions on tree felling and encroachment on pasture land, heaved a sigh of relief.

Besides the old irrigation tank, desilting of the percolation tank Phool Sagar and strenghthening of its embankments also started. Lying almost at the entry point of the village, it would get swamped during the rainy season and flood the main track connecting Lapodia to the outside world. Travel to and from the village during the monsoons meant taking a long detour for the people.

But no work on the land is complete without the planting of trees. To provide the soil with vegetative cover to bind the ground together and retain moisture was equally important. Though protection of the gochar land against undue felling and logging and illegal encroachment, paved the way for natural regeneration, planting efforts made the pocess more keen and concerted and bound the land together, preventing surface run-off and soil erosion from the ravages of washing rainfall.

The 3 months of May, July and July are relatively easy on the daily work schedule of the agrarian communities. With the harvest completed by April, the fields are left

unburdened till the next sowing, scheduled with the onset of monsoons in late July or early August. This time is ideal for seed collection and preparing of nurseries for regenerating the lost species cover in the villages. Here again, no foreign, exotic flora were planted. Most of the seeds were collected from the available resources at home, ensuring the participation of the entire village and promoting a better understanding, awareness and love for one's own environment and indigenous flora. In fact, these months form a part of the activities carried out throughout the year.

'Diwali' is the time, when the harvest of the first (kharif) cropping season is over. The kharif crop is harvested sometime during the October- November months. After the sowing of the second crop is completed, 'Diwali', the festival of lights, ushers in the second season in the calender of farmers year. And the period of 'Devudhni Igyaras' is an auspicious time for the people all over India. It indicates an auspicious time to initiate new activities and the desilting of water bodies, be it johads, talaabs, all the activities, connected with any soil work. Most of the earthen work is started in this period and goes on till the end of February to early March, just before the time to harvest the second crop is ripe. All community work is done during the months of December to February, followed by the intervening summer months before the monsoons.

The 1st.—15th. December has always meant the time to begin 'padyatras' and on the 'Devudhni Igyaras', there is an air of festivity in the village. The people of Lapodia begin their procession to the gochar bhumi amid much funfare. It is the time to pledge their protective vows and to the beat of the drums and rhythm of folk songs and 'bhajans' (holy hymns), the procession of colourfully attired men, women, children, young and old make their way to the gochar bhumi. To the rising chorus of slogans for protecting their trees and gochar, the 'puja' or worship of the land is performed by the priest. After anionting the trees with the 'tilak' (holy symbol) from the puja thali, they are decorated with the friendship bracelets or 'rakhis' that the people tie to the tree trunks or branches, as an oath and commitment to protect them against any danger. The entire area of the gochar land is marked by the 'Kar' (a holy boundary line sprinkled with holy Gangal and milk) establishing the boundary of the pasture land and ensuring its safety as a protected eco-zone.

The seed collection period starts. The seeds of Ber, Desi Babool, Neem, Kair, Khejri are collected from the trees and bushes in Lapodia and even from the surrounding villages. Children play an active part in this activity. Travelling with their cattle for grazing, they spend much of their time in collecting seeds of Ber, Kair, the hardy, indigenous species which are found extensively in the region.

And just as the clouds, dot the sky and the first showers cool the land, the seeds are scattered on the pasture land, along the embankments of the talaabs, near the school, the village well and in all the open expanses. In Lapodia, the people have even adopted 5 trees for their own homes. 'Neem', 'Amvla'(Indian Gooseberry, Phyllanthus emblica), 'Tulsi' (Basil), 'Sheesham', 'Aru' (Maha Neem, Ailanthus excelsa) are the species mostly adorning the courtyards of the peoples' homes.

But the efforts initiated in Lapodia, did not stop with efforts limited only to this single village. For the people of the surrounding villages also joined hands in making Lapodia what it is today.

The people of a single village are tied in bonds of family, friendship and relations, which extend beyond the boundaries of a single village to the many brothers and sisters who reside in the neighbouring villages. The visiting friends and family members from outside villages, were witness to the changing face of Lapodia and invitations to visit the neighbouring villages began to pour in from far and near. Beginning with the first 'padyatra' (people's rally) in late '90; ten surrounding villages were visited. In each village, the need of a people's Gram Sabha was focussed and conservation and protection of pasture land was mooted.

By early '93, the awareness generation reached its peak. In early January '93, the entire Lapodia village. had gathered to chalkout the work schedule for the entire year under the aegis of its Gram Sabha. A system of having 2 annual meetings of the entire village ensuring the participation of the maximum people from each household had evolved. This was in addition to the fortnightly meetings of the Gram Sabha. This general meeting of the entire village enhanced the involvement and participation of the people, providing an informal platform for open debate, dialogue and interaction of individuals from all walks of life. Besides, it strengthened the spirit, the enthusiasm and direct bonding of the people with the work in their village. It is the time when contribution to the Gram Sabha 'kosh' or the village fund are made and collections are made either in cash or kind. The contribution amount so decided is in keeping with the amount, within the easy reach of each household (averaging around Rs. 50 each household). The planned tasks for the year'93, involved the construction of culvert on the Phool Sagar for easy passage of the overflow of the talaab. The construction of another percolation talaab the 'Dev Sagar' was also planned, next to Phool Sagar. A well for providing drinking water to the village, a canopy (Chattri), to ensure the cleanliness and safety of the drinking water was also planned. Besides this the people also took upon the responsibility of a 'Khel-Kota' or drinking water trough for cattle, to be constructed near the talaabs so as to provide adequate drinking water facility for the domestic cattle.

'Chaukri' the aligned earthwork

The agricultural fields to the north of Phool Sagar, are mostly 'Barani' or 'rainfed lands', lying in the upstream of the percolation and irrigation talaabs. Running along the higher level contour lines, these lands were too far way, from the reach of the irrigation talaab lying in its downstream. Hence, much of the land survived only on rainfed irrigation. Thus called 'Barani'. But rainfall on these lands

caused heavy surface run-off owing to its natural slope, towards the nallah at the base of the village. Though rain was a welcome phenomenon, it wrecked havoc on the Brarani lands and with each passing year, the loss of fertile top-soil was weighing heavily on the farmers' minds.

To stall the great volume of water from running waste, a deep channel was constructed along the circumferance of the fields to collect all the surface run- off. Served with a steep, strong, earthen embankment on the outer side of the channel, it almost resembles a long, semi-circular wall lining the field limits. This 6 kms. long drain has come to be recognised as a feeder canal for Phool Sagar, collecting and diverting the excess water from the fields to the bed of the percolation talaab. This canal has also helped in increasing the moisture levels in fields, checked soil erosion and restored and ensured the fertility of the agricultural land.

These ongoing activities made Lapodia the hub of many environment camps, training workshops and field visits. With the increasing curiosity and interest of the people from the surrounding villages, the end of March '93, saw the GVNYM, host an environmental camp in Lapodia. With the participation of about 5 individuals each from the surrounding 10 villages, there was much sharing of indigenous knowledge, wisdoms and experiences in the company of the invited experts from outside.

Early July '93 and the time was ripe to initiate the plantation activities. But this year, the plantation efforts spread to 80 other villages. Starting with a training meet focussing on the problems of water and soil erosion, it extended into a field visit and direct contact with people in their homes, hearths, fields. In a long tour, spread out over 20 days, about 15 people travelled 10 kms. and conducted meetings in 4 villages everyday. The people's rally was not just banking on outside expert opinions but also had the native, indigenous master craftsmen or 'Gajdhars' (experts in land and water conservation) accompanying them . In the padyatra it became clear that even the young children understood the need for environment conservation. Slogans on trees, water and soil conservation were on everybody's lips. Thus, in almost 80 villages there developed a common felt feeling that trees, water and land were the basis of human life.

Almost as a cause and effect axiom, 8th of September '93, became a meeting ground of about 250 people who had gathered at 'Diggi' (a large township in the vicinity), from these 80 villages to discuss what they could do to safeguard their environment. This strong collective voice of the people converged into the first 'Paryavaran Panchayat' (Environment Council), held in the region and reinforced the will, the commitment and the strength of collective action.

And soon, the bearings of fame had even reached the capital region of the country. To expand the activities of pasture land protection and regeneration, Development Alternatives (an NGO based in Delhi), came forward to support and replicate the 'gochar bhumi' development in the surrounding 20 villages. In '93, Jagvirji and Ramchanderji (of GVNYN) visited these villages, spending two days in each village, interacting, sharing and strengthening the echo of pasture land regeneration. Taking the elderly into confidence, they formed informal groups of 'environmental protection samitis' in each village, in charge of the upkeep and safety of their pasture lands. These samitis proved to be extremely successful in creating condusive environment in their villages. For example, in early February

'94, some people of Gaiga (a neighbouring village), started felling some trees in the protected Gaiga pasture land. The Gaiga environmental protection samiti objected to their misconduct but was unable in convincing them. A few elders from Gaiga approached GVNYM. Laxman Singhji and others of GVNYM immediately accompanied them back to Gaiga and conducted a meeting with the entire village. The next day, the culprits were invited to visit the protected Lapodia pasture and seeing the flourishing green belt of the regenerated pasture with their own eyes made them realise their mistake and till date, the Gaiga pasture is safe from tree-felling and hunting. These samitis conduct monthly meetings in their villages and are provided with any support, when the need arises and also invited to participate in training camps, workshops, padyatras held regularly at Lapodia or any of the neighbouring villages.

This has today created an environment suitable for an annual meeting ('sammelan' large meet) of the environmental protection samitis from the neighbouring forty villages, to discuss and plan out the activities to be undertaken each year. But participation is not limited to planning and monitoring only. Infact people from all the 40 villages may participate at any single ongoing work site.

The system of padyatras (rallies) also ensures that the participating people contribute their Shramdaan (voluntary labour) in the villages, the rally may pass through. Today, most of the rallies are greeted with great fanfare and fesitivity in each villages. After a meeting in the host village, the ceremony of tying Rakhis to the trees, is always followed by some Shramdaan activity in the host village.

The process of change is not an easy one. Wear and tear are parts in the continuous dynamic chain.

Early '94, called for better planning of the Lapodia pasture land. The boundary walls had suffered the ravages of '92-'93 monsoons and collapsed in places. An immaculate and ingenious system of soil and water conservation was evolved.

The natural contour of the land, follows a two-sided slope, tilting the major part of the land towards the monsoon drain running parallel to the lands, along its southern periphery. A small incline towards the east, further complicates the geography of the land. The overflow channel from the waste weir of 'Ana Sagar' (the old restored talaab) vertically dissects the pasture into two parts. 90% of the gochar bhumi lies, directly below the western arm of the big, irrigation talaab and the remaining lies on a small piece below the belly of the Ana Sagar. Thus, the gochar bhumi lies sandwhiched between the Ana Sagar at its head and the monsoon drain at its feet.

Work was initiated on the entire land area of 50 hectares, to integrate the ravaged land into a single, composite and protected unit.

The entire pasture land was divided into equidistant, horizontal rows of 'Chaukas' or open-ended rectangular dimensions of earthen bunds with a length of 400 ft. and two sides of 200 ft. each, raised from the foundation plinth of 5 ft. to a height of 3 ft. Raised on three sides, the fourth side was left open to receive and retain the water within the raised Paals. Enclosed within the Chauka, lies the 'Santra' or trench, at a distance of about 5 ft. from the earthen walls. Dug out to a depth of 1ft. but measuring a 10 ft. wide span, its design follows the rectangular shape of the outer Chauka.

The Santra and the Chauka together, changed the course of the surface run-off. The rushing water had to face the barriers of the Santra and Chauka stalling its hurried march towards the low-lying monsoon drain. Rising almost like barricades to check the speed and retain the volume of the massive surface run-off. The flowing water now had to follow a checkered path. From the jump into the Santra to the slide along the earthen walls of the Chaukas, its earlier singularly, straight wash-off the face of the land, was now replaced by the ziz-zag meander following the Santras and the Chaukas. The Chaukas were raised in such a manner so as to ensure, that after filling the water in one Chauka, the excess passed on to the next. Such corridors of juxtaposed Chaukas, in horizontal rows on the face of the land, are finally connected to a discharge channel, draining into the monsoon drain.

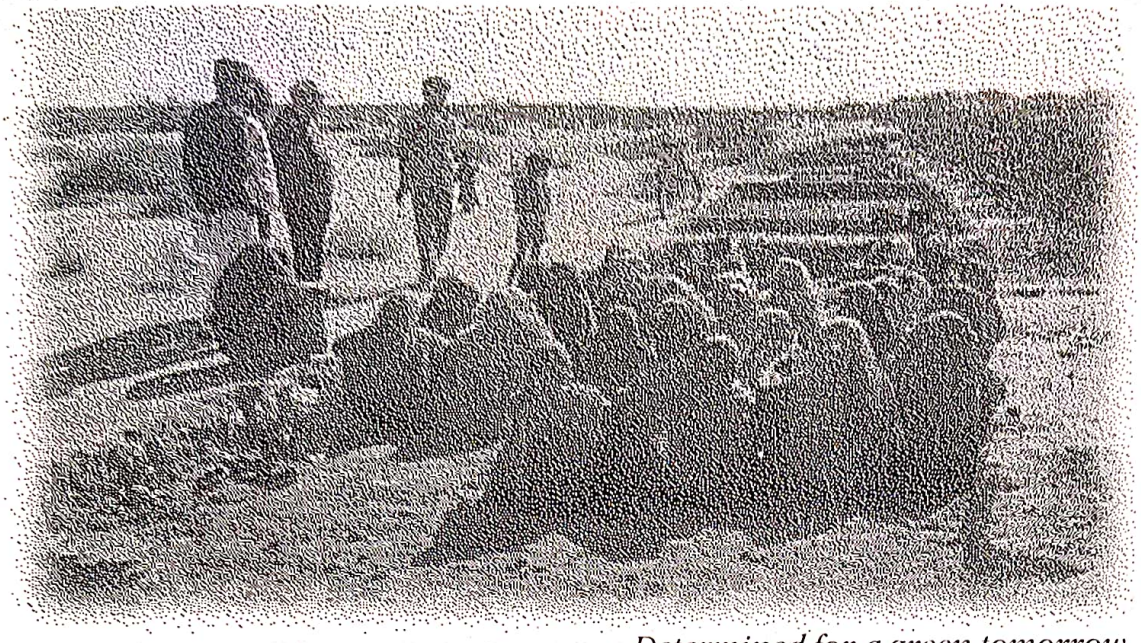
The Santras were designed to help reduce the force of water on the walls of the Chaukas. With the presence of the trench like Santra, within the walls of the Chauka, the flowing water was served with a sudden fall, which greatly retarded its speed and force. Besides, the play of soil and water is naturally prone to wear and tear. The soil on the Paal cleaves, to deposit in the soil of the Santra. With the passage of time, the earthen embankments have to be re-strengthened and the deposited soil in the Santra, readily supplies the needful within easy reach.

Besides, the trench serves as a green carpet of lush grass and vegetative growth and the Paal of the Chaukas stand firm, bound by the trees and dense foliage of the pasture land.

The water retained in the Chaukas and Santras helped in storing water on the ground, facilitating increased infiltration, restoring the moisture in the land and arresting the rampant top-soil erosion in the quick retreat of the rainwater along the sloping face of the earth.

In early '95, stone pitching was undertaken along the concave, inner lining of the earthen embankment of Ana Sagar. This was crucial for protecting the invaluable earthen embankment of the irrigation talaab, against the force of excess water in the tank bed and prevent wastage of the stored, precious water against undue seepage. Two irrigation canals were also laid out from the 'Moris' (sluices) located on the eastern side of the talaab with a length of 1 km. and $1^1/_2$ kms. each. These two became instrumental in irrigating 300 hectares of agricultural lands, lying in its downstream.

Efforts were also initiated to conserve and divert the water, which drained out of the village houses. This water made its passage along the dusty tracks, from the southern part of the village and was collected in a small johad located in the fields downstream. This system of drainage linked the smallest house to the planned drainage pattern of Lapodia. Most of these low-lying agricultural lands, are protected from soil erosion and surface run-off by the mud 'Medbandhis' or earthen bunding, along the contours of the fields. The excess water draining from the village is collected in the 'Dund talai', translation verbatim would mean 'punishment talaab' but in reality, finds its meaning in talaab, constructed in lieu of the the punishment or fine accrued to some individual or community. It is not uncommon, to find 'Dund talais' in many parts of our country. When a penalty imposed as a form of punishment for any wrong converted into the building of a talaab in atonement. This Dund talai is an old talaab, built generations ago but finds



Determined for a green tomorrow

relevance in the obedience, the society still pays, to its moral codes and culture which ordained against the wastage of water. Water drained out from the homes after use, can definitely be recycled to irrigate the fields. This talai constructed on the agricultural fields, helps in restoring and raising the moisture level in the soil, by arresting the surface run-off and ensuring the spread of the water across the fields for a longer period of time, facilitating greater possibility of infiltration into the soils.

Besides the 'Dund talai', even fresh efforts have been initiated in the rising boundary walls (medbandhis) in the agricultural fields and raising small johads on the farmlands to increase the moisture level in the soil and conserve the rain water in the fields. One such johad was constructed in the fields, lying at the tail end, in the southern most corner, on the periphery of the Lapodia lands. Located much beyond the reach of the irrigation canals of the Ana Sagar, it had the good fortune in the shape of an aquaduct, which runs along its western and northern sides. The slope of the land determined that the western part of the fields, running along the aquaduct were on an incline sloping towards the low-lying parts. And the middle of the land had a geographical depression, ideal to serve as a receiving bowl for all the water which sloped off the land on the incline. The location was ideal to strengthen the low-lying area with earthen embankment, to ensure the collection of all the rain water which washed down the sloping land.

Work on the 'Mansarovar talaab' had started in late '94 but got completed only by early '96. A channel was also dug out from the aquaduct, to serve as a feeder canal for the talaab. The waterspread area of the talaab is around 50 bighas (land measure $^{5}/_{8}$th. of an acre) of land and helps irrigate 100 bighas. The paal runs for more than a kilometre in length with a 60 ft. base and 10 ft. width at the top and has a height of about 10 ft. above the ground. The walls of the embankment are strengthened with the planting of indigenous species of trees. The agricultural fields, have seen concerted efforts to strengthen the southern periphery of this plot of land, as at this point, the distance between the nallah and the fields is greatly reduced and the monsoon stream almost starts touching the land limits. Much of

The ocean of Ana Sagar palpitates in the visible fields

the land in the past, had thus been prone to ravages of the monsoon drain, when the rising waters of the nallah cut deep gullies into the adjoining fields. Most of the land today, lies protected by the high rise of the medhbandis and stengthened with dense vegetative cover to bear the onslaught of the monsoon rains and drains.

Lying close to these agricultural lands is the 'Chowli' pasture land, a small plot located in the southern nook of Lapodia. Work started with binding the soil together with the medbandhi activities and plantation of indigenous species of plants. Shramdaan was provided by the people of Lapodia and Ursewa (neighbouring village) jointly and is slowly regenerating its lost cover.

The efforts in land and water conservation in Lapodia, is an integrated and multipronged approach to make interventions and changes at every step. Weaving Lapodia in a composite unit. To intercept, collect and conserve the rich resources of water and soil from wastage and misuse. From the waters in the talaab, to the collected moisture in the gochar bhumi, to the interception of the drainage, leaving the village households, irrigation in the fields and the increased moisture level in the land; it has been a chain of efforts, carefully planned, monitored and linked in the bonding of perception, love and service of the people, who were not prepared to see even a drop of water falling on their land go waste !

And the efforts have not gone waste either! In one year ('96 harvest), the fields irrigated with the waters of the Ana Sagar, gave bumper crops and the village recorded an increase of Rs.35 lakhs in its annual income. The total agricultural land in the village is about 500 hec., which in earlier times was mostly rainfed. Producing only one poor kharif crop, harvested after the rains. The main crops were of coarse grains of 'Bajra' (millets) and 'Jowar' (Barley).

But with the completion and the repairs of Ana Sagar, rain water could be stored in the talaab upto February, making a headway for the harvest of a second (Rabi) crop. With ample water resources, the kharif output also showed a 100% increase and moong (pulses) and maize, could be added to the crops produced. In addition the rabi season saw the harvest of wheat for the first time after many years. The name 'Ana Sagar', given to the big talaab; implying an ocean of grain, is indeed a befitting epithet, that has brought an ocean, bounty of grain into the lives of the Lapodia people.

Participating Countries in Participatory Watershed Management Training in Asia PWMTA Program GCP/RAS/161/NET Afghanistan Bangladesh Bhutan China India Myanmar Nepal Pakistan Srilanka Thailand Farmer-centred Agricultural Resource Management FARM Program RAS/93/062 China India Indonesia Nepal Philippines Sri Lanka Thailand Vietnam Participating Countries in Participatory Watershed Management Training in Asia PWMTA Program GCP/RAS/161/NET Afghanistan Bangladesh Bhutan China India Myanmar Nepal Pakistan Srilanka Thailand Farmer-centred Agricultural Resource Management FARM Program RAS/93/062 China India Indonesia Nepal Philippines Sri Lanka Thailand Vietnam Participating Countries in Participatory Watershed Management Training in Asia PWMTA Program

GCP/RAS/161/N ... Myanmar Nepal
Pakistan Srilank ... agement FARM
Program RAS/ ... Lanka Thailand
Vietnam Particip ... ent Training in
Asia PWMTA Pr ... utan China India
Myanmar Nepal ... tural Resource
Management FA ... l Philippines Sri
Lanka Thailan ... ory Watershed
Management T ... T Afghanistan

Ripples of the Society

Bangladesh Bhutan China India Myanmar Nepal Pakistan Srilanka Thailand Farmer-centred Agricultural Resource Management FARM Program RAS/93/062 China India Indonesia Nepal Philippines Sri Lanka Thailand Vietnam Participating Countries in Participatory Watershed Management Training in Asia PWMTA Program GCP/RAS/161/NET Afghanistan Bangladesh Bhutan China India Myanmar Nepal Pakistan Srilanka Thailand Farmer-centred Agricultural Resource Management FARM Program RAS/93/062 China India Indonesia Nepal Philippines Sri Lanka Thailand Vietnam Participating Countries in Participatory Watershed Management Training in Asia PWMTA Program GCP/RAS/161/NET Afghanistan Bangladesh Bhutan China India Myanmar Nepal Pakistan Srilanka Thailand Farmer-centred Agricultural Resource