

5-River Rejuvenation through MNREGA

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Brief Background

Bundelkhand situated in the western part of Uttar Pradesh. There is 07 districts of Uttar Pradesh which falls in the Bundelkhand region. Due to geographycal location, most part of the Bundelkhand is stony & rocky, because of this there is a problem of water throughout the year. The structures like ponds, canals & wells are mostly dried & sometimes drain off is too high so that the recharge of water is also not so appropriate so that will resist this problem, hence good structures like checkdam, gully plug along with river rejuvenation plays an important part to fulfill the need of water in whole Bundelkhand Region.

There are two major rivers Mandakini & Odi which flows in the bundelkhand district and is also the lifeline of whole bundelkhand region. Most of the domestic need of the villagers are filled due to this river. Such as Irrigation, drinking and for the domestic purpose. Apart from this the ponds are recharge with the help of this, Wells also get recharged due to this, small canals also get water by the virtue of this river. By seeing the importance of this river proper flowing of this river is mandatory to fill the basic daily needs of the villagers. MGNREGA plays an important role in creating the structures which hold the water so that it will be use for various purpose such as check dam , gully plug wells ponds along with this MGNREGA gives a new life to the river Mandakini which flows in this region. Below image shows how Mandakini river is dried up in the whole field , there is no sign of water can be seen in the district Chitrakoot before the MGNREGA works.

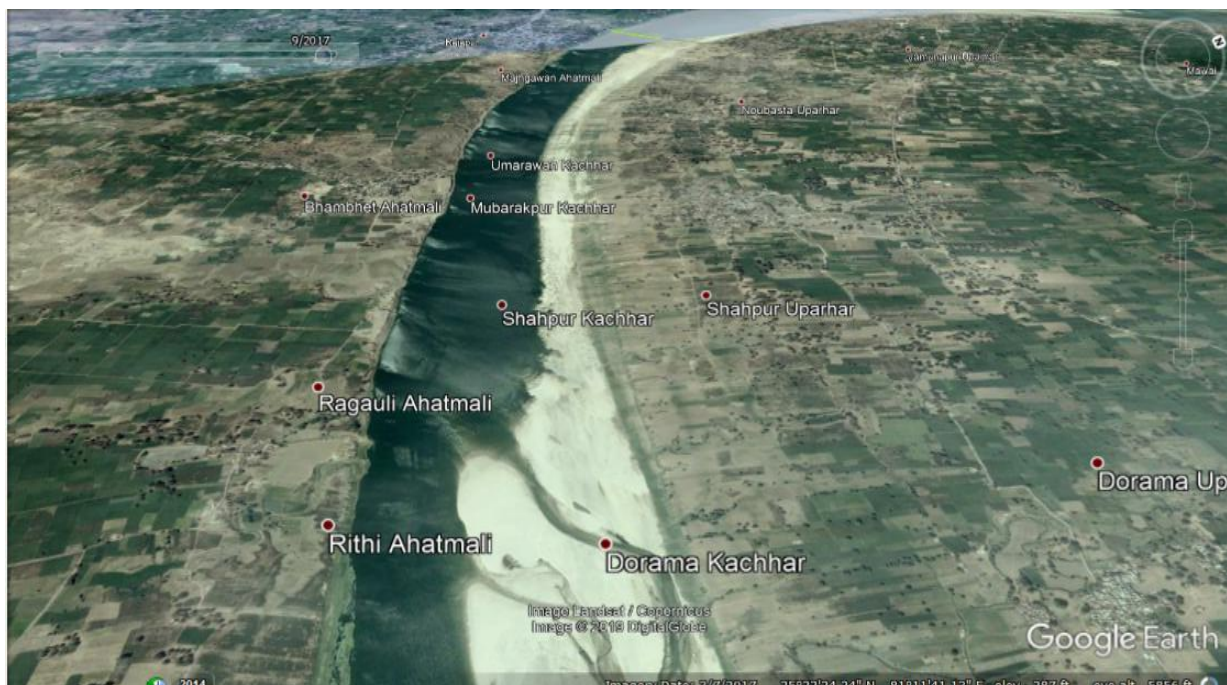


- **River Mandakini**

(i) Key Issues

1. Silt Deposition

Both rivers such as mandakini & Odi are heavily consist of silt deposition. As the river Mandakini flows in 19 GP's of Distrcit chitrakoot the dependency of the villagers are so much on this river. Around 19 KM's silt deposition were found in the path of mandakini river during Phase-I. So cleaning of it is bit huge challenge.



2. Awareness

Most of the villagers are not aware how to give a life to this river as their whole basics need totally depending on it. MGNREGA plays an important role to create awareness and encouraging the labours to participate in the cleaning of such river by giving them 182 Rs/ Day as a wage.

3. Location

The geographical location itself is a critical issue. Due to rocky and stony lands, its not easy to work in all the weather and surrounding conditions is also a huge challenging part of it.

(ii) Critical Strategies

1. Dividing the Desilting work in Phase-I & Phase-II

Due to geographical conditions the desilting of river mandakini is divided in Phase-I & Phase-II.

Phase-I The desilting was done along the 19 KM's with the total Expenditure of Rs. 95.24 lacs. During this desilting 54114 Mandays were created. The best part is among total mandays, 46 % participation is from the women.

Phase-II The desilting was done along the 11 KM's with the total Expenditure of Rs. 29.44 lacs. During this desilting 16181 Mandays were created. The best part is among total mandays, 44 % participation is from the women.

Phase	Covering Area	Participation	Generated Mandays	Expenditure
PHASE-1	19 KM	Male- 29221 Female-24892 46% Participation	54114	95.24 LACS
PHASE-II	11 KM	Male-9061 Female-7120 44% Womens Participation	16181	29.44 LACS

(iii) Action Plan

The desilting cannot be done if the action plan is not carried out effectively. Action plan is carried out in a following way:-

(1) Field Survey

Field survey of the 19 panchayats through which the Mandakini River flows is the basic and mandatory part of this desilting.

(2) Measuring Path Flow

The path along which the Madakini flows is also considered in action plan, so that District team have a clear picture of its flowing pattern & direction.

(3) Work Division

Desilting is a huge work so cleaning of it is taken in the Two Phases. Phase –I &Phase-II.

(4) MGNREGA Role

MGNREGA plays a vital role by giving such manpower so that this action plan is carried out effectively & efficiently.

(iv) Convergence

- 1.MGNREGA
2. Irrigation Department.

(v) Role Of Agencies

Irrigation Department plays an important role while giving their technical guidance and helps the MGNREGA worker to create a layout of plan such as where & how much to dig in sequence and how to execute design along with cost estimation in the whole work.



(VI) Specific Locations

The desilting work was done in 19 GP's of district chitrakoot. These Gram Panchayat's are:-

1. Chaura
2. Deval
3. Nehra
4. Kalwara Bujurg
5. Kalwara Khurd
6. Bhanpur
7. Byohra
8. Archha Barethi
9. Audha
10. Lohda
11. Panuti
12. Sagwara
13. Bhatri
14. Mahuwa Gaon
15. Sardhuwa
16. Arki
17. Kuseli
18. Bhadedu
19. Kankota



(VII) Financing Options

Phase-I: The desilting was done along the 19 KM's with the total expenditure of Rs. 95.24 lacs, and is fully funded by MGNREGA.

Phase-II: The desilting was done along the 11 KM's with the total expenditure of Rs. 29.44 lacs, and is fully funded by MGNREGA.

(VIII) Expected Outcomes

By considering all the issues, a critical strategies were made to overcome with this problem and hence an action plan is made so that the work will flows in a strategic direction. As a Result mandakini River start flowing in all the patches where there is no sign of river. Now farmers get plenty of water for their basic needs such as Irrigation, drinking etc.



(IX) Monitoring Method And Indicators

Each and every action plan is carried out on daily basis. A monthly target has been set up by the officers of Rural Development. These officers continuously watching the desilting activities, and hence monitor accordingly.

- **Odi River**

(i) Brief Background

Odi river is originated from the Madansagar pond at place of Katal in Madanpur village of Mandwara development block. The total of 4 gram panchayats including the Gram Panchayat Madanpur, Didaunia, Hansera and Paharikala are situated in the basin of this river. Because of the formation of excessive check dams on river Odi and due to the accumulation of the silts, the river's water source had ceased and the river also lost its original form. This river had completely disappeared for the last several years and the geographical and vegetative balance of the river started to deteriorate, due to which the revival of the river Odi was extremely important.



(ii) Key Issues

Silt Deposition

For the availability of water for agricultural work in the district Lalitpur, the construction of wells, ponds and their cleaning etc. is very necessary and because of silt deposition the water is not flowing properly as a result the ponds near to river are dried and wells also dried. In order to provide adequate water to maximum number of farmers, the work of water conservation is done at various places in the basin of Odi river. This work has been done by MNREGA with convergence of other schemes for water recharging and work in the foothills of the river, which is used by local farmers for various purposes.

(iii) Critical Strategies

The strategies were made on basis of silt cleaning patches which comes around in the path of river and repairing of checkdams along with wells. So that the villagers get plenty of water for their basic need.



(iv) Action Plan

In the Odi river, 42 locations were selected in a distance of 14 Kms from Madanpur to Jamni Dam for water conservation work. Out of them water conservation works were done in 33 places near various places / villages in the river from month of April to June during the year 2018-19. The work been further started in the remaining 09 locations and 05 new locations during March 2019.



(v) Convergence

This work was completed with the convergence of MNREGA Yojana and Gram Panchayat funds. In which Rs. 63.99 lakhs were spent from MNREGA and Rs. 23.30 lakhs were spent from the Gram Panchayat fund(State Finance Commission). The raw work was done under MNREGA and stone cutting / breaking of the river was done by the village Gram Panchayat fund.

(vi) Role Of Agencies

State Finance Commission gives their financial support while Mgnrega gives their financial as well as labour support both for the implementation of this work. Implementing Agency was respective Gram Panchayat's .

(vii) Specific Locations

The desilting work was done in 04 GP's of block madawara, district lalitpur. These 04 Gram Panchayat's are Madanpur, Didoniya, Hashera & Pahadikala.



PREVIOUS CONDITION



PRESENT CONDITION



PREVIOUS CONDITION



PRESENT CONDITION





PREVIOUS CONDITION



PRESENT CONDITION

(viii) Financing Options

This work of rejuvenation of Odi river was started in the year 2018-19 and partial completed in the year 2019-20. The total cost of this work was approximately Rs. 87.29 lakh and about 31000 man days were created.

(ix) Expected Outcomes

- Studies have found that farmers and local people are fully satisfied with these tasks. According to them, water is available for irrigation by these works, which gives greater benefit to Rabi crop. Production of crop has increased from earlier.
- Before the resuscitation work the river was dry for many years and the water was not available in it. With the resuscitation work, water has become available in it.
- 3-4 times irrigation is taken by the farmers living in nearby area.
- Animals are also getting water.
- The beneficiaries who were interviewed told that they have worked on this for approximately 25-35 days. Thus employment generation is done and there is also additional income from MNREGA.
- Some basic outcomes are given in below table:-

1.	Generated Persondays	70,666
2.	No. Of Families beneficiaries from Mgnrega	558
3.	No. Of Families beneficiaries from Irrigation	3500
4.	Irrigation Area	9,600 acre
5.	Beneficiaries Villages	08

- Approximately 2500 hectare Crop area got benefitted directly. Crop yield doubled/tripled/many fold in some areas. People of 04 GP villages got benefitted and ecosystem of the area was also got strengthened.



(x) **Monitoring Method and Indicators**

The River Odi is a ideal river, which originates from hilly slopes as well as from a lake, which is called Madansagar Pond. Long back ago a dense forest was there, but now this dense forest got depleted. We have contacted Sri Rajendra Singh, “Jal Purush” who got Raman Magsaysay Award with our kind request. he visited the site with D.M. Shri Manvendra Singh along with all officers of different departments like engineers of Minor irrigation etc. Shri Rajendra Singh described that this river is very good for rejuvenation work, desiltation of river is needed, dredging work also required for opening of aquifer, which were sealed over the period of time due to over siltation. By these aquifer water from river percolate in to land mass in the rainy season. When rainy season over from these aquifer water oozes out drop by drop whole of the year. He also suggested that along the whole length of the river desiltation of other water bodies like natural ponds and as well as man made Wells were also needed. By these aquifer water from river percolate into these natural ponds & man made wells in rainy season. After rainy season water from these water bodies come out in to river through these aquifer. Thus round the year water cycle would maintain. He also suggested the each turn of river deep digging is needed. These deep cavities later on become GENE POOL for river. For rejuvenation work of river the development of these GENE POOL is very necessary.

As with the guidance of Shri Rajendra Singh, the work has been started simultaneously in all the four Gram Panchayats, When the dredging work is going on aquifer become open results plenty of water oozes out in to whole length of river. Two to five feet water was available in the season of summers. The whole work got done by MGNREGA fund. On whole process, 31000 men days were generated and 510 households got employed. Expenditure of this work was tune off 36 lakhs. 24500 plants of various variety were planted along the whole length of river. 3-4 times water for irrigation were available in these all 4 Gram Panchayats. Earlier this river can only supply 1 or 2 water for irrigation. In the season of summers there was no source of drinking water for wild animals. After rejuvenation work of river wild animal also got available drinking water.