

Raman River Rejuvenation Model



Why need this model?

The existence of small and rainy rivers in India is nearing its end. The new generation has started considering the small rivers of the ancients as the drains of domestic and industrial effluents. On the one hand, the rivers that carry water throughout the year are getting less water, while the rainy rivers have dried up due to the depleting groundwater level. Villages, towns, cities, and industries have made these dry rivers a medium to discharge their liquid and solid waste. In such a situation, where the existential crisis has arisen for the rivers, their identity has also changed. It has almost made a large section of the society believe that the rainy rivers can no longer revive.

We started the work in the year 2005 itself to convert the hopelessness created in the society regarding small and rainy rivers into hope. On the basis of this determination, we started working on the East KALI river of Ganga-Yamuna DOAB (middle area of two rivers). The results of the efforts made on the East KALI River have given us energy, enthusiasm and encouragement that the rainy rivers of India can be revived, but for this systematic efforts will have to be made. Some efforts are being made for river rejuvenation in different parts of the country as well. A systematic model of river rejuvenation has been prepared on the basis of years' own experiences and on the basis of the work done for rivers and the opinion of experts. Based on this, the work of river rejuvenation is progressing. Based on this model, where we are doing the work of rejuvenation of rivers like HINDON, West KALI, NEEM, KARWAN and KRISHNA, river lovers from different states of the country are making efforts to rejuvenate their rivers. This model has been named Raman River Rejuvenation (RRR) Model.



RRR Model

This is a very simple model. Some of the measures suggested in this, show immediate results and some have long-term results. By adopting this model, any small and rainy river can be revived in five to ten years. This model will bring prosperity for the society living on the banks of the river. While the river is an important part to implement this model, the movements of one KM from both the banks are also very effective. The work suggested in this model can be successful only with the collective effort and cooperation of the society and the government.

Ten Basic Points of RRR Model

Knowledge of the River

Marking of River land

Revival of the River origin

Liquid & solid waste management

Cleaning of the River stream

Public awareness

Intensive afforestation

Rejuvenation of natural water resources

Chemical free farming

Construction of small dams



Knowledge of the River

काम से पहले नदी का ज्ञान।
तब ही बनेंगे नदी के काम।

The river on which we must initiate the work of improvement or rejuvenation, firstly it is necessary to have the following information about that river:

1. History of the river (public opinion and scientific side).
2. Social and religious importance of the river.
3. All documents related to the river (official/non-official).
4. Knowledge of river origin.
5. Information about the length and flow area of the river.
6. Status of water in the river.
7. Current problem of the river.

In this too, first it is necessary to know the origin of the river properly. The medium of flow of every rainy river is the result of the mixing of both groundwater and surface water. Surface water has been mixed with groundwater at the place where the groundwater level is highest (CHOIYA) i.e., formation of water bubbles on the surface of the ground). That is, it is the lowest and waterlogged place of the region. The places where the situation of water logging has been created in a dense form, such a place develops as the source of the rainy river. For the last 4 to 5 decades, the origins of the rainy rivers have been watery and encroachment free. As the groundwater level kept going down, the residents encroached upon the vacant land and this was the reason that gradually the origin of the rainy rivers kept getting occupied.



Ministry of Jal Shakti, Department of Water Resources, RD & GR

3 Jul • 🌐

काली नदी पुनर्जीवन के कार्य का पहला बदलाव दिखने लगा है। कार्य अनवरत जारी है। प्रस्तुत है पहले व आज की तस्वीर।

Before



Now



Marking of the River Land

नदी होगी जब कब्जामुक्त।
तब ही बहेगी पानीयुक्त।

Most of the land along the banks of the rainy rivers is occupied in some way or the other. From where any rainy river starts, either there will be any pond, lake, empty place, or crops. Beyond the origin of the river, even in the total length of the river flow, both the banks of the river will be found encroached. Somewhere the farmers have made their fields by mixing them with the river and somewhere others have occupied the river land. In some places, where the area of flow of the river is more, the farmers start doing agricultural work inside the river also. In such a situation, just like origin of the river, it is necessary to free the land on both sides of the river flow area. For this, by coordinating with the local administration and giving proper information about the river, the land of river origin and river flow area should be marked. According to which districts the total area of the length of the river flows through, according to it, in each district of the river flow, this work will have to be done through the administration of different districts. The river land on both the banks of the river should be measured and marked. If possible, pillars should be erected on the identified river land.



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जल संसाधन, जल विभाग और जल संरक्षण विभाग
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES
RIVER DEVELOPMENT & Ganga REjuvenation



Save
water



The Ministry of Jal Shakti, Department of Water Resources, RD & GR [shared](#) the recent success of Raman Kant Tyagi, the **Hindon River Waterkeeper** (Uttar Pradesh, India) and prior **East Kali River Waterkeeper**, who restored the East Kali River from a swamp into a river.

Revival of the River Origin

नदी उद्गम में जब पानी होगा।
तब ही नदी का बहाव बनेगा।

The mother of any river is the water present at its origin that is why it is necessary that the origin of the river should be watery. Therefore, it is necessary that the first effort should be made to revive the origin of the river. This work can be done in the following way. To mark the origin of the river according to the revenue records, gazetteers, and other related records should be studied. Then inspection of river origin shall be carried. We cannot know whether the land of the river origin is recorded in the revenue records, whether that much land is present on the spot. For this, the measurement of the land of the river origin will have to be done from the Deputy Collector/Tehsildar of the concerned tehsil. For this work, the cooperation of high officials, dignitaries and public representatives of the concerned area can also be taken. If there is no encroachment on the land of river origin, then it will also be clear through the team of Tehsil. If there is encroachment on the river origin land, then the first task will be to get that encroached land free. If there is domestic effluent or any non-refined liquid waste of industries coming from anywhere at the river origin, then first of all, with the help of the local pollution control department, this pollution will have to be stopped or its proper solution will have to be done. If there is neither any kind of encroachment on the river origin nor any kind of pollution is coming there, then work should be started immediately. Assume that if the river origin has 10 hectares of land, then leaving a track of ten meters around it, a lake of about 8 to 10 meters depth should be constructed there. For the rainwater to come into the lake from all sides, it is necessary to make channels for water to come from under the tracks. It will be decided on the land of river origin that what type of lakes, ponds and dams can be built there. For this, we can also consult the local minor irrigation department, irrigation department or any subject expert. The origin of any rainy river should be such that maximum amount of rainwater can be collected there. If it is possible to bring additional water from a canal or stream, then this can also be done. Every proper arrangement should be made so that the source of the river remains full of water throughout the year. Intensive plantation will also have to be done around the point of origin with the advice of the local forest department or any subject expert. When gradually the source of the river starts to be filled with water, then the groundwater level there will start rising gradually. The day the level of groundwater will come near the surface, on that day water will start flowing beyond the point of origin. The flow of this water will be the first step for our river to resume its course.

The Return of Kali



Liquid & Solid Waste Management

जब नदी में न जाएगा कचरा-बहिस्राव।
तब निर्मल बनेगा नदी बहाव।

In this work, the work of any social organization or other groups working for the river is limited, because stopping the effluents of domestic and industries is a complex process that only the government can do. In this work, where a lot of rules and regulations are used, its financial burden is also high. In such a situation, social organizations or groups can help the village to use natural water treatment methods to stop the flow of dirty water into the river. Although the participation of villages in this work will be less while that of towns and cities will be more, but for this awareness work should be done in the villages also. While the management of liquid and solid waste coming out of cities and towns will have to be done, the industries which pour their liquid and solid waste through any medium in the river will have to be curbed. For this some concrete steps must be taken by the government. ETP is installed in every industry, and it must be ensured that it is operated properly. STP for liquid waste and proper arrangement for solid waste disposal should be made in every city and town. For the flow of the river to be uninterrupted and pure, it is also necessary to clear its flow path. It is very necessary to completely clean the dirt of the river's stream or flow path once.



Namami Gange

28 Jul • 🌐

आज काली नदी में बरसात का आया भरपूर पानी। गौरतलब है कि जिला प्रशासन, मेरठ के सहयोग से काली नदी के पुनर्जीवन का कार्य किया जा रहा है। नदीपुत्र रमन त्याग... See more



Manoj TyAgi and 91 others

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Cleaning of the River Stream

नदी मार्ग जब साफ होगा।
तब ही निर्मल नीर बहेगा।

To make the flow of any river, it is necessary to clean the main way of its flow area. It is often seen that the areas downstream of small rivers are littered with dirt or they are illegally encroached upon. In such a situation, we should clean the area of river flow from both the banks and the bottom. This work can be done in a better way by fixing the responsibility of cleaning the area of the river flow in which the village/town/city comes. The filth coming out of the river should not be dumped on the banks of the river but should be thrown so far from the river so that it does not come back

Public Awareness

गांव-गांव जब हाथ बढ़ेंगे।
नदी सुधार के काम बनेंगे।

Public awareness work about the river will have to be promoted in villages, towns, and cities within one KM from both the banks of the river. In this, street plays, wall writing, competitions in schools, village-to-village journeys, street meetings and public awareness meetings should be done prominently. Whatever work a common citizen can do for his river rejuvenation, information about all those works will have to be conveyed to the village/town/city through public awareness. Such a program of public awareness will have to be conducted so that all the residents of the river banks agree to fulfil their duty towards the river. There should be public awareness among the villagers about all those subjects which are necessary for river rejuvenation. In which chemical free agriculture, plantation, pond conservation, balanced use of water, waste disposal and cleanliness are the main topics.



Ministry of Jal Shakti, Department of Water Resources, RD & GR

16 Sep • 🌐

On his celebrated show 'Rag Rag Mein Ganga', popular host Shri Rajeev Khandelwal tells the revival story of Kali River that has... See more

See translation



Namami Gange is with Nawazuddin Siddiqui.

5 Jul • 🌐

काली नदी पूर्वी के पुनर्जीवन के कार्य में सहयोग के लिए आज फिल्मी कलाकार **Nawazuddin Siddiqui** पहुंचे। उन्होंने नदी किनारे पौधारो... See more



Intensive Afforestation

नदी किनारा रहे न खाली।
पेड़ करें उसकी रखवाली।

Intensive plantation should be done on river and pastureland within a radius of one KM from both the banks of the river. In this, such plants should be planted on the banks of the river, which collect water in their roots and prevent erosion. Special schemes should be run for the farmers to plant orchards in the villages falling within this radius of one KM so that more and more farmers can plant orchards on their agricultural land. By doing this, where there will be more rainfall in a few years, the groundwater level will also rise, which will help the river to flow clean and uninterrupted. In the work of intensive afforestation, full cooperation of the local forest department, local society and social organizations should be taken.

Rejuvenation of Natural Water Resources

कस्ला-गैती आओ उठाएं।
अपना तालाब स्वच्छ बनाएं।

When the ponds in the villages up to one KM from both the banks of the river are clean and full of water, then the groundwater level of the village will rise, while the amount of pollution present in the ground water will gradually decrease. The rise in the groundwater level will make it easier for the river to flow, as the river flows through both groundwater and seawater. The ponds of all the villages within one KM from both the banks of the river should be identified and revived on the basis of revenue records. If there is any lake or pond on the banks of the river, then it is necessary to revive that too. If there is any government land lying on the banks of the river where a pond can be constructed, then it should also be done with the help of the local administration.



Namami Gange

3 Aug • 🌐

Due to the effort and dedication put in by the NEER foundation in rejuvenating the [#KaliRiver](#), the change is now visible in the... See more

See translation



Chemical Free **Farming**

फसल होगी जब रसायनमुक्त।
नदी बहेगी तब गुणयुक्त।

Agriculture up to one KM from both the banks of the river will have to be chemical free. By stopping the use of any kind of chemicals and pesticides in any crop, agriculture will have to be done there by natural methods. With this, where the crop products will be pure and nutritious, the quality of agricultural soil will improve. Due to the continuous use of chemicals since the Green Revolution, their particles slowly seep into the groundwater. Chemical-free farming will also improve the quality of groundwater and the chemicals and pesticides that used to flow into the river with irrigation water or rainwater will also be prevented. In this work, the benefits of agriculture related schemes of the concerned district can be taken.

Construction of Small **Dams**

जब बांध बनेगा धारा पर।
तब ही भरेगा नदी का घट।

When the disposal of liquid and solid waste in the river is completely banned, then small dams should be constructed at a certain distance according to the situation. Where there is no pollution in the river, small dams should be built. Through these dams, where we will retain water on the surface of the river, we will also be able to send it to groundwater. With this water will also be available to the residents, birds and animals etc. The work of building a dam on the river should be done only after getting technical assistance from the local minor irrigation department, land conservation department, irrigation department or subject expert, the type and distance of the dams.



Action Strategy

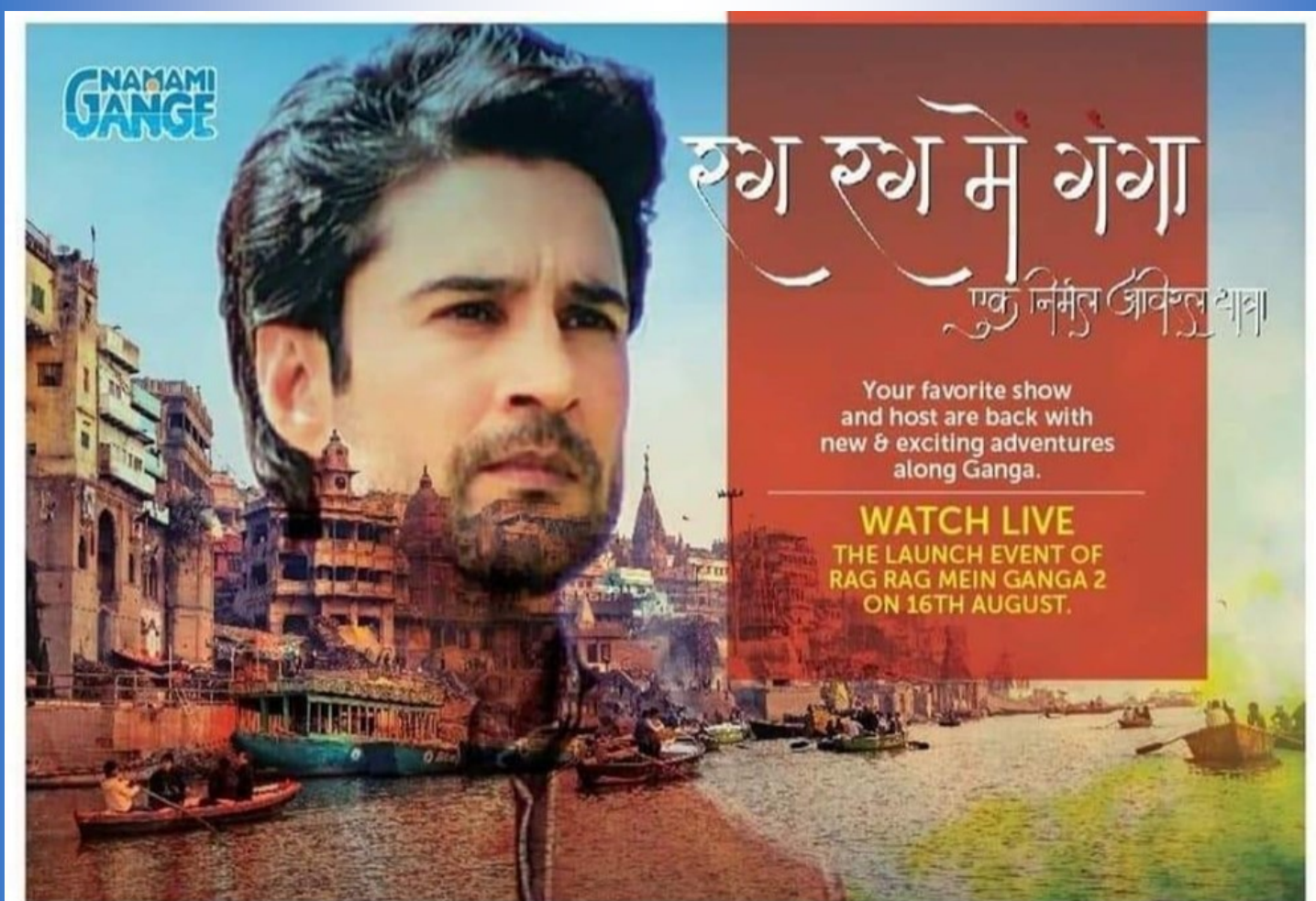
My River - My Initiative program can be conducted to implement Raman River Rejuvenation Model, as 10 Mantras works can be systematically completed through it.

My River - My Initiative

MRMI should be started as a social initiative for river improvement. Its purpose is to connect and support the society along the riverbanks with the positive efforts of the governments. All the work done under this program can be done only with the cooperation of the society and the local administration. This is one such social initiative in which any common man can contribute in any way in the conservation of his river. Under this initiative, the society situated on the banks of the river and the society affected in any way by the river can contribute from their level, understanding their responsibility.

My River - My Initiative Draft

A Central Committee is constituted in MRMI. A district committee is formed in each district of the river flow area. A village committee is formed in each village/town/city on both the banks up to one KM away from the rivers. There are five members each in central, district and village/town/city. A media committee of two members is constituted at the central level. The selection of district and media committees will be done by the central committee and the selection of village / town / city committees will be done with the consent of the central and district committee of the concerned village. All the members of all the committees will be working in this field, subject experts and retired officers who will be unpaid. On the basis of these committees, a river council is constituted. River improvement can be completed through this river council.



Ministry of Jal Shakti, Government of India telecasted a famous show
“Rag Rag mein Ganga” hosted by actor Rajeev Khandelwal.
 He covered our work for regional rivers extensively.

My River - My Initiative Volunteers

Under this program, volunteers of MRMI are appointed in the villages along the banks of the river. Any common man can become a volunteer who believes that he wants to contribute something for his river. These volunteers can contribute from anywhere and in any way. Any volunteer can submit his plan for contribution to the conservation of the river in front of the Central Committee of MRMI. These volunteers will be the real protectors of the river. These volunteers will play a cooperative role in every work of river conservation. Volunteer Conferences may be organized from time to time as per convenience whereas an Annual Conference is mandatory. All the works of Raman River Rejuvenation Model will be done by volunteers with the help of village/town/city, district, and central committee. Following are some of the functions.

Note: It has been seen that different types of schemes have been run by each State Government and Central Government from their level for rivers, water, villages, agriculture, health, and animals etc. The departments related to all the problems are present at district, tehsil and block level but still the structure of rivers is getting disintegrated. There are four main reasons behind this:

- Failure to implement the schemes properly at the ground level.
- Lack of information of the schemes to the local people.
- Improper actions by the government departments.
- Pervasive corruption.

To rejuvenate any river, the volunteers must circulate complete information about government schemes in the villages. By doing this we will do good to our people and rivers.

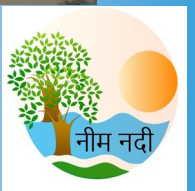
My River - My Initiative Promotion

To make this program successful, the help of various publicity media can be taken. This includes Facebook, Twitter, Mobile App Portal, Website, Logo, Mouthpiece (Hindi, English & Local Language), Pamphlets, Pamphlets, Stickers, Banners, Wall Writing and Documentary Film etc.



Note

The river on which even 80 percent of the plan of the above 10 basic elements are applied, then that river will return to its original existence in 5 to 10 year's time. To implement all the 10 elements, it is necessary to prepare a detailed road map for a particular river.



6 CLEAN WATER AND SANITATION



13 CLIMATE ACTION



14 LIFE BELOW WATER

