Training on
Small River Rejuvenation
under
Atmanirbhar Bharat Abhiyaan (ABA)

Atmanirbhar Bharat Abhiyan

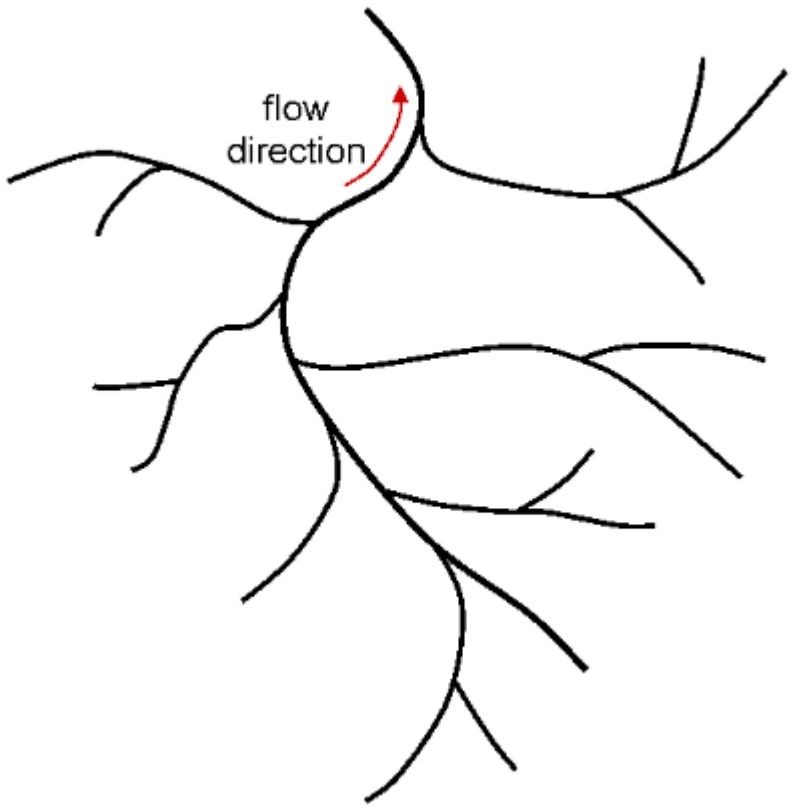
Objective: Provide employment to 60 lakh migrant workers & saturate villages with public infrastructure

Focus districts	**90** districts across 6 States receiving highest migrants
Programs	**15** ongoing schemes to be converged in 120 days
Monitoring	Central teams to be assigned for monitoring at the field
Duration	120 days

Small river rejuvenation

Need for taking up small river rejuvenation

- A river system essentially comprises of large number of smaller rivers/ rivulets which merges to form bigger rivers.
- For ensuring flow during lean season and rejuvenation of bigger river, it is important that smaller rivers carry flows and remain in state of good health with quality of water conforming to bathing standards.
- **Rapid urbanization, steep population rise, climatic changes, indiscriminate extraction of natural resources** transformed small drainage channels into drains or dried these channels.
- Small rivers often Seasonal rivers carry large flows during monsoon but often remain dry during non-monsoons. These non-monsoon rivers carry flows which are contributed largely from the ground water component.



Small river rejuvenation

Steps required for rejuvenation of small rivers

- Integrated management of rain water, surface water, ground water and soil moisture.
- Activities shall be low cost and easy to train locals.
- Interventions by Civil society
- Intervention by forest and environmental agencies.
- Community participation including NGOs in restoring, maintaining and sustaining critical balance and piousness of ecosystem at large
- All three approaches need to be synchronized with techno-economically viability
- Concentrated efforts of all stake holders is prerequisite.

Small river rejuvenation

Targets/ Achievable

- Main stream within the water shed should become semi perennial with base flows up to several months after the stopping of rains.
- Flood flows in the streams within watershed should be clear and less turbid similar to a stream coming from a well wooded forest, indicating soil erosion is not taking place.
- Ground water table levels should rise and all the dug wells within the watershed should yield sufficient water even in summers of drought years.
- The watershed area should be rendered drought proof.

Small river rejuvenation

Possible interventions for rejuvenation of the rivers

Desilting	Due to sedimentation and lack of flows, rivers gradually gets silted up and loose its water carrying capacity. By proper removal of these deposited sediments, water carrying capacity of the river may be augmented.
Encroachment removal	River bed and flood plains of smaller rivers, particularly near the human settlements is brought under cultivation and encroached for other anthropogenic activities. This alters the river course and damages its health.

Small river rejuvenation

Possible interventions for rejuvenation of the rivers

Afforestation and protection of water bodies

- Catchment area treatment methods like afforestation, protection and revival of water bodies like wetlands, ponds, ox-bow lakes etc. play a major role in revival of rivers and local flora and fauna.
- Afforestation, development of green belt along the river course will prevent tendency for encroachment and may also contribute in retention of moisture in the sub soil. The antecedent soil moisture may eventually contribute to flows in the rivers.

Small river rejuvenation

Possible interventions for rejuvenation of the rivers	
Construction of check dams and other activities	• Construction of check dams at appropriate locations and other water harvesting structures, ground water recharge and augmentation can be achieved eventually helping increase the flows during the lean season. • These activities can take place through community involvement with technical inputs from Ground Water & Irrigation departments.
Construction of check dams and other activities	• Interventions like digging water retaining shallow pits staggered along the general slope of land to delay the sheet flow of water along the slopes. • These activities can be undertaken in barren land or panchayat land in direct draining catchment.

Small river rejuvenation

Possible interventions for rejuvenation of the rivers

Pollution abatement activities

- Discharge of untreated sewage waste water and dumping of solid waste on the banks of rivers are major source of pollution. Identification of such sources of pollution is needed.
- Cost effective simpler methods like oxidation ponds, ex-situ/ in-situ treatments and adopting measures like flood plain protection, organic farming should be undertaken.

Small river rejuvenation

Implementation Plan

- In Ganga basin, certain institutional framework like District Ganga Committee already exists, which can be utilised.
- In each of these districts, one or two small rivers can be taken up this year for special attention for rejuvenation with the involvement of **Gram Panchayats under MGNREGA** with technical inputs from ground water & water resources departments.
- Monitoring by Central team (Progress and technical inputs).

Small river rejuvenation

Implementation Plan

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- In case for rivers which flows across two or more districts, special attention shall be given towards the works so that works done in upstream and downstream stream stretch of river are in synchronization and complement each other.
- In some of the districts sewerage infrastructure related works are already underway through Namami Gange Programme. The works shall be continued.

Small river rejuvenation

Steps so far.....

- A DO letter dated 24th April 2020 with signature from four Secretaries of D/o Rural Development, D/o WR, RD& GR, D/o Land Resources, D/o DW&S was sent to Chief Secretaries of all States/ UTs requesting States to undertake works of small river rejuvenation under Jal Shakti Abhiyan, 2020.
- A DO letter May 2020 by DG, NMCG was forwarded to District Magistrates of all Districts falling under Ganga basin, to take up works for rejuvenation of small rivers in Ganga basin.
- A brief Guideline document giving outlines of the steps. Works required to be taken up for effective rejuvenation of small rivers have been developed and shared with State Govt and District Magistrates.
- A District wise indicative list of small rivers (**more than 100 river covering 72 Districts in States Uttar Pradesh, Bihar, Jharkhand, Madhya Pradesh and Rajasthan**) for has been prepared and shared with the State Govt and District Magistrates.
- Along with the District-wise list maps of these identified rivers on GIS platform has been shared.
- The data/ information has also been put up on NMCG's official website (https://nmcg.nic.in/abamps.aspx).

THANK YOU