

PROTOTYPE – FACT SHEET

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WORKING GROUP: 1 – ADAPTATION

ORGANIZATION: Telangana State Industrial Infrastructure Corporation Ltd. India

TITLE:

Improving Water Management and plantation through Private–Public contribution

Mission statement

To improve the water management of the industrial park

Briefly describe your prototype idea

The site is located approx. 83km from the city of Hyderabad in the South state of Telangana. The total area of the site is 3,86km² (954,23 acres) with certain areas already under development. The development of the Green Industrial Park (GIP) at Jadcherla had commenced in 2007.

In terms of climate, this site is prone to high temperature, barren lands and drought prone area. Hence, it is necessary to improve the recharge and ensure the impact of industries and climate change is reduced.

1. The storm water management system provided for the Site Master Plan of GIP Jadcherla includes:

Storm water drainage is provided in the Site Master Plan to collect rainwater. The slopes/contours of the industrial park have been assessed and accordingly the entire site has been divided into various zones.

2. Storm water drains should be provided along the roads accordingly: The storm water collected from each zone will be collected in lined tanks, tested and treated if required, and then sent for recycle/reuse.

3. The storm water collection would be on the basis of 1 hour peak rainfall with 85% coefficient of runoff.

4. The rainwater over and above 1 hour peak rainfall will flow to the recycle/reuse tanks or ponds. Rainwater from areas without any contamination risks would only be diverted for rainwater harvesting. Rainwater, after treatment if necessary, will be collected in ponds that will be integrated within the green landscape to serve in aesthetics as well as micro-climate control. Additionally, it will also be used for gardening/horticultural purposes and for industrial uses, if there is a demand. Seven locations have been identified in GIP Jadcherla for ponds.

5. As per the volume of water expected to be collected in the watershed, the pond areas were calculated. This area has been integrated into the green areas to co-create storm water management and recreational zones, which can be visually attractive, cost effective, as well as socially functional.

6. The services for storm water management has been taken up through appropriate business cases (e.g. PPP). Individual industries should be required to recycle/reuse storm water collected from their premises, after treatment.

7. Major plantations drive involving various stakeholders for improving the water and reducing the heat island effects in the industrial park. Here, all the industries are contributing by providing maintenance of the plants and government contributes by providing saplings.

symbiosis by clustering all the backward linkages (value chain) of manufacturing formulations within the Pharma City (see below):

Target group

The main beneficiaries are industries and nearby community.

Potential partner(s) for implementation

1. TSIIIC (Telangana State Industrial Infrastructure Corporation)
2. GIP Jedcherla Industrial Association
3. Industries

Key challenges and opportunities

Challenges:

So far, Stormwater is not considered under business case

Opportunities:

1. Government supporting water management
2. Industries came together for development

Next steps

Implementation of plantation has begun and design of sustainable storm water drains are under process