


SAMASPUR POND PROFILING

PHYSICAL DESCRIPTION

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| Name of water body | Samaspur |
| Location | Samaspur village near community centre, Block – Gurugram |
| Latitude & longitude | 28°42'70.9" N and 77°06'70.17" E.  |
| Area of water body | 3.07 Acre |

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| <p>Site view of the water body</p> |  |
| <p>Maximum depth</p> | |
| <p>Mean depth</p> | |
| <p>Type of water body</p> | <p>Natural</p> |
| <p>Current status</p> <ul style="list-style-type: none"> • Dry • Encroached • Polluted | <p>Currently, the pond is polluted due to continuous discharge of municipal waste from the village.</p> |
| <p>Source of water inflow</p> <ul style="list-style-type: none"> • Rainfall • Runoff • River • Drain(covered) • Open drains • Waste water drain • Treated waste water from STP • Others (specify) | <p>Source of water/ inflow in the pond is rainwater runoff and municipal waste from the households.</p> |
| <p>Is there any outflow from the water body. If any, describe</p> | <p>During rainy season there is no outflow of the water from the pond which goes into wetland beside it.</p> |
| <p>Water level Changes (annual) in meters</p> | <p>There is approximately 1 to 1.5 meters of the fluctuation in pond water level during the summer and the winter seasons.</p> |

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| Are there any river/canal/major open drain passes within a radius of 5-10 km of the water body? If so, outline the nature of their flow and distance from the water body. | There is badshahpur drain running at a distance of 650m |
| Groundwater level (Pre-monsoon and Post-monsoon)- | |
| Does the water dry out completely? <ul style="list-style-type: none"> • Every year • During summer • Rarely | During the summer season and when the rainfall is lower than the expected, pond does not gets dry out completely. |
| Catchment area of the water body in sq.km | |
| Land use of the catchment area <ul style="list-style-type: none"> • Urban • Agriculture • Forest • Mining | Catchment area of the water body is urban village having plain topography |
| Total Population | 2514 |
| Is the water body used by animals for drinking and bathing? | No |
| Type of flora fauna found around the water body | There is presence of mostly kikar in surrounding areas. |

Geo tagged image of water body



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| Ownership of land | MCG |
| Khasra number | 31/1 |
| Landscaping around water body | |
| Free space around water body | 450sqm |
| Can the water body be used as active urban/public space | Yes, the water body can be used as urban/public space. |
| Are there any construction activities going on near the water body | There's construction of community center going on near the water body |

FUNCTIONS OF WATER BODY

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| <p>Is the water body used for :</p> <ul style="list-style-type: none"> • Drinking • Agriculture • Horticulture • Fisheries • Others | None |
| <p>Functions of water body:</p> <ul style="list-style-type: none"> • Groundwater recharge • Flood mitigation • Tourism • Support biodiversity | <p>Currently, water body is used only for collection of waste generated from the village and also act as main source of ground water recharge and flood mitigation. It can also support biodiversity, influence microclimate, socio-cultural and aesthetic.</p> |


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| <ul style="list-style-type: none"> Influence on microclimate Socio cultural Aesthetics | |
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MAJOR PROBLEMS

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| <p>Major problems:</p> <ul style="list-style-type: none"> Reduction in area Reduction in depth Encroachment Algal bloom Aquatic weeds Decline or loss of fisheries Eutrophication Organic pollution Toxic pollution | <p>The major problem associated with the water body is reduction in depth of the water, encroachment, reduction in area, organic pollution, which cause the decline or loss of aquatic life in the water body.</p> |
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SOURCE OF POLLUTION

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| <p>Does solid waste dumping takes place near the water body? (Organic/Non-Biodegradable)</p> | <p>Direct dumping of solid waste can be seen near the water body.</p> |
| <p>Solid waste disposal in water body (religious offering/idol immersion)</p> | <p>Since the pond is located inside the village and has continuous discharge of municipal waste it is not used for any religious purpose.</p> |
| <p>Source of pollution in water pollution</p> <ul style="list-style-type: none"> Municipal waste Industrial effluent Organic waste Non biodegradable waste Solid waste In pond human activity | <p>Municipal waste, organic waste.</p> |

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| <ul style="list-style-type: none"> • Cattle wadding • Agriculture runoff | |
| <p>Nutrient level in water body</p> <ul style="list-style-type: none"> • Negligible • Low • High • Very high | <p>Due to continuous discharge of the municipal waste, nutrient level i.e.,organic pollution is very high in the water body</p>  |

REMEDIAL MEASURES

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| <p>Are local communities aware of the problem of water body</p> | <p>Yes</p> |
| <p>Are local communities interested in the restoration</p> | <p>yes</p> |
| <p>Any measures taken in past to restore the water body</p> | <p>No</p> |
| <p>Are there active local conservation group or NGO interested/involved in the water body</p> | <p>No</p> |
| <p>Is it possible to source good quantum of rainwater/treated water for maintaining water level throughout the year</p> | |
| <p>Restoration activities require:</p> <ul style="list-style-type: none"> • Improvement of water quality by in-situ treatment | <ul style="list-style-type: none"> • Improvement of water quality by in-situ treatment by diverting the sewage into the STP which can be built near the water body. • Catchment treatment to check erosion |

- Diversion and treatment of sewage waste
- Desiltation for removal of toxic sediments
- Weed removal
- Catchment treatment to check erosion
- Confinement of pond land

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