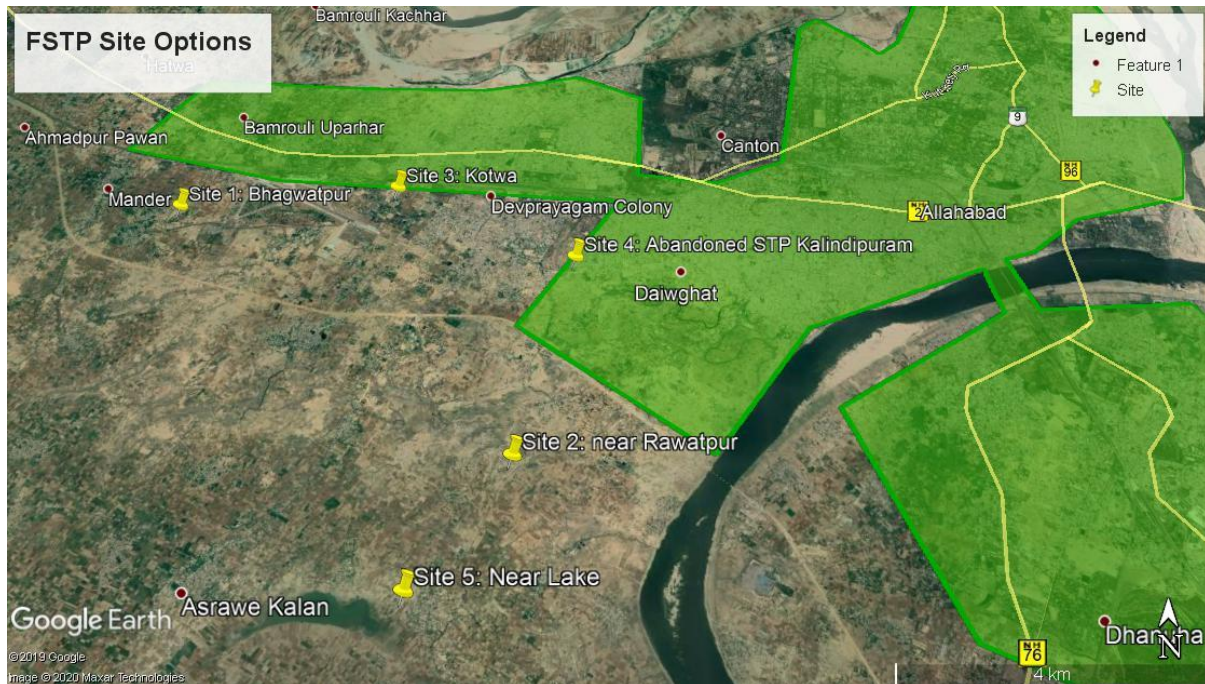


Assessment of potential sites for Faecal Sludge Treatment Plant at Prayagraj

Background:

On 11th Jan 2020, CSE team visited five potential sites for establishing Faecal Sludge Treatment Plant for the treatment of faecal sludge generated from household dependent upon onsite sanitation systems in western Prayagraj including peri-urban areas.

The locations of the five sites is shown in the map below:



Based on scoring criteria for FSTP, ranking for suitability of the sites for FSTP is given below:

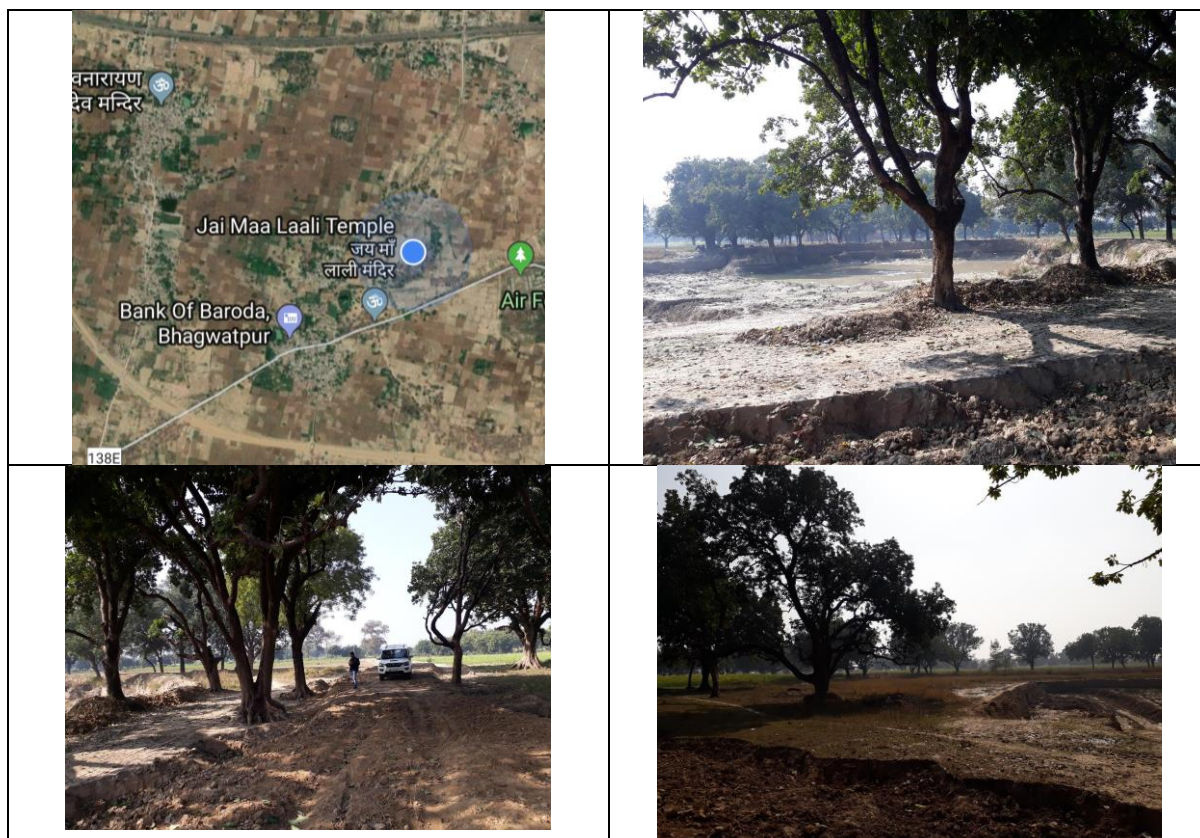
1. Site 1: Bhagwatpur (**Score – 87**)
2. Site 2: Rawatpur (**Score – 71**)
3. Site 4: STP Kalindipuram (**Score – 59**; scoring would improve drastically if an NOC from ADA can be obtained)
4. Site 3: Kotwa (**Score – 49**; good location wise but there are private plots adjacent to it; reports of dispute or private claim to the site)
5. Site 5: Near Lake (**Score – 69**; seems to be scoring well as per the criteria since readily available and scope for re-use; Not recommended as site is highly undulated (a hill in the middle); a lake in 100 to 200m and more that 5 to 6 kms from the habitation area)

A comparative with detailed scoring of the five potential sites is shown below:

Criteria	Site 1: Bhagwatpur	Site 2: Rawatpur	Site 3: Kotwa	Site 4: STP Kalindipuram	Site 5: Near Lake
Ownership of land	Govt. land - 8	Confirmation needed. - 4	Govt. land. Under dispute from private parties - 4	Ownership of ADA. – 4 ; availability for FSTP needs to be confirmed	Govt. Land - 8
Availability of land	Readily available (based on initial discussion; to be confirmed) - 10	Confirmation needed. - 3	Confirmation needed - 3	Confirmation from ADA – 3 (area available 0.5 acre)	Readily available (based on initial discussion; to be confirmed) - 10
Distance from residential area / habitation	500 – 1km - 7	3 – 5 km - 7	100 – 500m – 3 (however, private plotting adjacent to site)	Within 100m – 0	Greater than 5 km - 3
Approach road	Wide road - 5	Wide road - 5	Wide road through colony – 2	Wide approach road – 5	Wide approach road – 5
Visibility and impact	Good road; display board improve visibility – 10	Good road (interior area) – 5	Good road (interior area) – 5	Prominent location; public transport – 15	Unreachable to common people – 2
Reuse option for treated effluent and dried manure	Reuse possible Effluent and manure – 15	Reuse possible Effluent and manure – 15	Partial reuse possible – 5	No chance effluent reuse / or manure – 2	Reuse possible Effluent and manure – 15
Disposal of treated effluent	Gravity – 5	Gravity – 5	Gravity – 5	Partial pumping – 3	Gravity – 5
Social acceptability. Is there any chance of problem for society?	No probability; no habitation – 10	No probability; no habitation – 10	Issues may arise; but can be addressed – 5	No probability as existing STP and SPS – 10	No probability; no habitation – 10
Chances of flood in the area	No recent flooding - 7	No recent flooding - 7	No recent flooding - 7	No recent flooding - 7	Occasionally flooding – 5
Is there any water body adjacent to the site	500m – 1 km – 10	500m – 1 km – 10	500m – 1 km – 10	500m – 1 km – 10	100-200m – 4
Total Score	87	71	49	59	67

Details of the five potential sites for FSTP visited is given below:

Site 1: Near Bhagwatpur; 1.5 – 2 acres available,



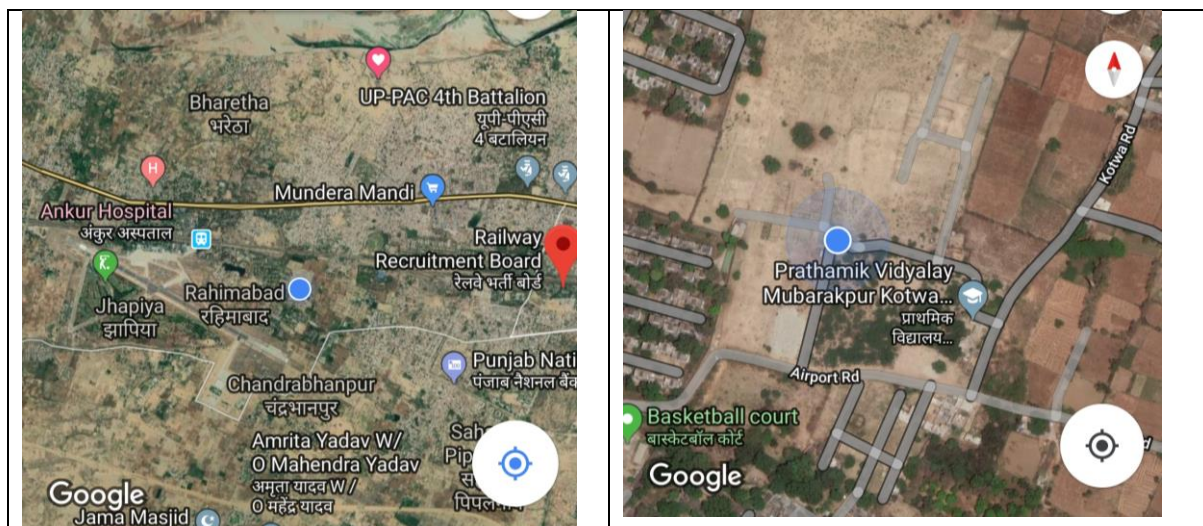
Site	Advantages	Disadvantages
Near Bhagwatpur (Approx. 2 acre)	<ul style="list-style-type: none"> • Site is accessible from 2 sides • Access from state highway • Closest to airport • New establishment coming up in the area • Mostly flat with gentle slope • No water body in vicinity 	<ul style="list-style-type: none"> • Few old trees needs to be cleared • Some excavated / illegally mined area.

Site 2: Near Rawatpur (adjacent to United Medicity)



Site	Advantages	Disadvantages
Rawatpur near medicity (Approx. 3 acre)	<ul style="list-style-type: none"> Barren land with flat gradient No water body in vicinity Agricultural land on the other side of the road Land accessible through wide road 	<ul style="list-style-type: none"> High tension towers within the site. Adjacent to high profile commercial development

Site 3: Adjacent to Shambunath temple (Kotwa Village)





Site	Advantages	Disadvantages
Kotwa near Shambhunath temple (Approx. 4 acre)	<ul style="list-style-type: none"> • Close to airport. • Flat land • Approx. 0.5 acre of land excavated (illegal mining) and cleared from vegetation available. 	<ul style="list-style-type: none"> • Site has dense vegetation • Site under dispute • Private plotting adjacent to site. • Small temple / shrine adjacent to site

Site 4: at the abandoned STP in Kalindipuram



Site	Advantages	Disadvantages
Defunct STP, Kalindipuram (Approx. 1.5-2 acre)	<ul style="list-style-type: none"> • Sludge drying beds of STP can be used in FSTP • Very approachable and visible • Existing infrastructure like boundary wall, admin room etc already available. 	<ul style="list-style-type: none"> • Sewer network is proposed in the area • Functional SPS in the vicinity. Can be an alternate FS disposal point. • Area available would be sufficient for FSTP. Showcasing green area through re-use may not be possible.

Site 5: Close to a Lake



Site	Advantages	Disadvantages
Near Kotwa (Approx. 2 acre)	<ul style="list-style-type: none"> Agricultural land around the site. Govt. land and readily available. 	<ul style="list-style-type: none"> Undulated site with steep slope on one side and low lying area on other Site is under dispute Farthest from non-sewered areas Water body nearby