A Sanitation (or Shit) Flow Diagram presents a clear picture of how excreta flows are managed within the city. The diagram clearly depicts how excreta flows from user interface to the final disposal. It has the following stages:

**Containment**
- According to Census 2011, Chunar has coverage of 9% sewer network but during the field-based study, it was found that there is no functional sewer network.
- Most of the households dependent on on-site sanitation systems either have septic tanks connected to open drain or lined pit.
- The size of the tanks and pits is based on the space available and affordability of the households. Due to no standardization being followed while constructing the containment system, few households have constructed septic tanks large in capacity irrespective of household size with the general perception of emptying the septic tanks only after an interval of 15-20 years. The newly constructed houses have septic tanks with proper baffle walls (Key Informant Interviews, 2016)

**Emptying and Transport**
- Since the NPP doesn’t own a vacuum tanker for emptying purpose, households are dependent on private emptying. Due to narrowness and congestion of the roads manual emptying is prevalent (Key Informant Interviews, 2016) in the city.
- The manual emptying is usually carried out by 2-4 people, depending upon the size of the containment, the average fees of emptying is Rs.1500-2000.

- 31% population defecate in open
- Types of on-site containments observed during field visit:-
  - Septic tank with an effluent pipe connected to open drain (56% population dependent on such a system, Census has 53% IHHT with septic tank + 3% dependent on community toilets)
  - Lined tank with semi-permeable walls and open bottom without outlet (13% population dependent on such a system, assumed remaining population from the census)
The effluent from the on-site sanitation system is conveyed through 27 open drains (small and big nallas) and disposed at Ganga river directly without treatment.

Supernatent which is effluent from containment systems connected to open drains is attributed to be from 28% of the population.

Faecal sludge (FS) not contained is attributed to be from 41% of the population, which is 28% connected to septic tanks and 13% connected to lined pits.

FS not contained but emptied, is attributed to be from 31% population, which is 25% connected to septic tank and 6% connected to lined pits.

FS not contained not emptied refers to 10% of the population, a part of it refers to infiltration into the ground, i.e. 7% of the population and part of it remains in the containment and is attributed to be from 3% population.

Treatment and Disposal

There is no treatment of sewage and septage generated in the city.

The city is surrounded with agricultural lands where the sewage is used for irrigation purpose.

The private emptiers dispose the faecal sludge at low-lying open grounds anywhere in and around the city.

50% of the wastewater generated in the city is disposed at river Jargo, 25% at river Ganga and the rest 25% on the agricultural fields (Mr. Mansoor Ahmed, Chairman, NPP).
Photo 3: Nallas terminating in River Jargo.

Photo 4: Nallas terminating on agricultural land.
Photo 5: Wastewater being used in agricultural activities.