As can be seen from Table 2 there exists the possibility of collecting at least 22,572 liters of water each day. This amount can be increased if at anytime during the day residents do not draw water from source no. 1.

Table 3 indicates the number of peasants who can benefit after meeting the needs of 120 students of the University of Fondwa.

Table 3: Residents benefitting from the available 22572 liters per day.

| Rations<br>(liters / person<br>/day) | Total # of<br>residents<br>benefited | Number of residents that would benefit after meeting the needs of 120 students |
|--------------------------------------|--------------------------------------|--|
| 40                                   | 564                                  | 444  |
| 60                                   | 376                                  | 256  |
| 80                                   | 282                                  | 162  |
| 100                                  | 226                                  | 106  |

Variations on the above rationing table can be analized. If, say, 80 liters of water were made available daily to each of the 120 students of the University of Fondwa, then a daily volume of 9600 liters would be required for the students. The remaining 12,972 liters could be distributed to other residents at the normal per capita rate of

consumption (30 liters per day) to meet the daily water needs of an additional 432 persons...

## **Equipment Specifications**

- 1. Horizontal Centrifuge Pump (multicellular) with the following characteristics:
  - Flow rate = 2 liters / sec.
  - Total mono-metrical height = 80 m
  - Suction pipeline = 1.5" (diameter)
  - Propulsion pipeline = 2" (diameter)
  - Suctioning level / height = 1.25 m
- 2. The pump will be operated by a 5 Kw electric motor, since an electric motor is more reliable, easier to operate and maintain, and less expensive to acquire and maintain.
- 3. A 15 Kw electric generator