EASTERN NILE IRRIGATION AND DRAINAGE STUDY/FEASIBILITY STUDY DINGER BEREHA IRRIGATION PROJECT

#### ANNEX 8: INFRASTRUCTURE

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# 1. INTRODUCTION

The current project woreda, Chewaka, was administratively under Dabo district in the pre Derg regime. A settlement program that created conducive environment for shifting Chewaka district from part of Bedele-Dabo district to an independent district has happened in 2003 where the area was selected to resettle people from East and West Hararge zones of Oromia National Regional State. Since December 2003 to April 2004 about 76882 people from West Hararge and East Hararge zones were resettled in the project district. The district capital is Illu-Harar and is named after the resettlement of the people from the mentioned areas.

In the project area, thus, a system of modern roads that linked the district with the zonal towns of Bedele and Illuababora are maintained and the district is connected via this road with other parts of the country. The district, Chewaka is located geographically between latitudes 8° 46'-8° 56'N and longitudes 36° 01'-36° 15'E.

The woreda is bordered by Dega district of Illuababora and Dega Leka district of East Wellega zone in the west, Gimbi District of West Wellega and Dega Leka of East Wellega zone in the north, Dega Leka zone of East Wellega in the east and Bedele-Dabo district in the south. The larger of the district's boundaries are demarcated by the rivers Didessa and Dabana fro the east and west respectively. The total area of the district is estimated to be about 33.34 km2, that puts the district to be the largest and shares about 11.37% of the zonal surface area.

This Infrastructure section of the feasibility report is intended to briefly describe what basic infrastructures, mainly road network is in the project area in order to expedite the development of the district as planned, and what the project, Dinger Bereha irrigation project can contribute to the burgeon of the infrastructures to attain the objectives of the project for its realization.

## 2. EXISTING ROAD NETWORK

Chewaka district is accessible by rural all-weather road via Dabo district to Bedele town and Nekempte town using a 74km long and a 142km long road respectively. The district is also linked with other parts of the country using this all-weather road, which after every rainy season requires intensive maintenance as most reaches of the road are aligned on undulating terrain that is susceptible for erosion by the high rainfall flood of the area.

The district's main capital, Illu-Harar is distanced 552km from Addis Ababa, 72km from Bedele and 192 km from Metu, the capital of Illuababora zone in which the district, Chewaka is located. As road availability is one of the variables for considering the extent and efficiency of road distribution over land (defined as the length of roads in km over the total area in km<sup>2</sup> per 1000 km<sup>2</sup>). Thus the district has road density of 47km per 1000 km<sup>2</sup>.

The road network within the district is fairly linked and there is a road network, seasonal that links each settlement sites with the center of the district, Illu-Harar. There is a 19km long dry season road that joins site nr 1 to site nr 8, Burka Bereka where the project weir site is located. Furthermore, there are other offside roads joining the capital town, Illu-Harar with other sites, like site Nr. 3, 4, 5, 6, and 7 each distancing from 5 to 10 kms from the centre.

Currently an all-weather road is under construction with a big bridge to cross the Didessa River and join the district, Chewaka with the Asossa Gimbi-Nekempte-Addis main highway road. Part of this bridge and most reaches of the road construction is completed and it is expected to be under use in 2010. When this road begins being functional the district will be connected with other parts of the country via the main Gimbi-Nekempte-Addis road and the

## 3. PROJECT PLAN OF ROAD NETWORK UPGRADING WITHIN THE PROJECT AREA

In the planning of Dinger Bereha Irrigation Feasibility Project, apart from the new access roads planned to be constructed along the major irrigation infrastructure designs, canals and drains, a total length of 46 km road network with about 14 river/stream crossing structures are planned to be upgraded in the project area in order to connect the production centres with each village or the main all-weather road.

distance of the district from Addis will be significantly shortened from about 560 km to about 430 km. In line with the districts development will boost accruing market opportunities.

The upgrading is planned to be made for the following road networks:

The road that joins Illu-Harar via site/village nr 7 to Urji Oromia (with 4 river crossing structures), 10 kms long, and from site/village nr 7 to NE village (with 1 river crossing structure), 4 kms long, from main road to village Dire Mosuma, 5 kms long, from Jegen village, main road to NW project area (with 2 crossing structures), 5 kms long, from Jegen village to Sire-Guda village, 3 kms long and from site nr 1/main road/ to Burka Berka village/weir site (with 7 river crossing structures), 19 kms long.

By upgrading these road networks the project area is believed to be well accessed and when the development of the planned project is implemented, the project area outlets to the market areas will be well facilitated.

#### 4. COMMUNICATIONS

The district is currently communicated with other areas using a direct line telephone system. In the centre of the district there is a telecommunications tower that enables the district to receive telephone network systems. The rural area centres have wireless telephone systems that enable communication with the district centres or the rest of the country and the world.

#### 5. WATER SUPPLY

The district is endowed with surface and groundwater resources. The community of the district use springs and streams as main sources of drinking water supply.Water supply schemes are broadly constructed in the year 1996 in different parts of the district. In this year and other previous times, a total of 74 springs and 8 hand dug wells are developed. There is also 1 deep borehole serving the capital of the district for water supply, and a network of water supply system from this borehole is made and most of the town's households have got a pipe water supply system in their compounds.

There are also common water points established in the common living areas, and the dwellers of the town use water for drinking and hygiene from these common water points sourced from the borehole tankers.

Generally, these days the water supply system has flourished and most of the village centres do owe either a hand dug wells or developed springs as sources of drinking water. Furthermore, under the WASH programme, the district is benefiting in getting more water supply facilities as discussed with the office of water resources development experts of the district.

### 6. ENERGY SUPPLY

Electric power system is stretched towards the district during the resettlement program and the district is facilitated with electric power supply. Not only the centre of the district, Illu-Harar, gets electric power, but also site nr 1 /village 1/ is also getting the hydroelectric power supply as the main grid passes via this village to the capital of the district.

Biomass and commercial energy sources like petroleum products are also used as parts of energy sources in most of the districts villages. Biomass energy sources include firewood, and charcoal, which are mainly used to cook and prepare food stuffs. Whereas, in the rural areas these sources are used also as light powers and other cooking, heat provision and etc sources of energy.

# 7. EDUCATION

Education is the main instrument for development of human resources and plays a vital role in the process of social and economic transformation. The sector is a motor for social and economic development requiring high rate of investment that puts great challenge for developing countries. The region, Oromia in particular and the country in general are planning to reach all habitants primary school provisions and improve the quality of secondary school education. This can be achieved through expansion of schools and reducing local disparities of schools as key strategy.

As the district is newly established after the resettlement, most of the schools are availed after the resettlement with limited numbers and most of the schools are under construction. Initially, for temporary purposes through community participation, 4 (1-4) grade levels of schools, and 3 (1-8) grade levels of schools were built to start with. In the academic year of 2004-2005, a total of 11318 school children were registered in the district to attend their education. Currently, all the settlement sites do have at least 1-4 primary schools, and there are numbers of 4-8 secondary schools well distributed with in the district. There is one preparatory school in the district being located in the main town, Illu-Harar.

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#### 8. HEALTH

Regional health policy emphasizes on the provision of a comprehensive primary health care by integrating the decentralized health facilities, health personnel and provision of equitable health resources. In the year 2004 the numbers of the health centres in the district serving the people were about 6 health posts. Currently many more health posts at different places and one big health center is built in the main capital of the district.

The ratio of the medical personnel, and health facilities to the district's population were far below as recommended by the World Health Organization (WHO). Moreover, a large number of the district's population lacks access to safe drinking water and sanitation facilities causing in wide spread of water-borne diseases. The most prevailing common diseases in the district are said to be malaria, which is mainly due to the topographic /lowland/ location of the district, gastro-Intestine, Internal parasite, Upper-respiratory Infection, Gastrite etc.

# 9. OTHERS

Institutions like Banks and Insurances play vital role in the development of and economy of a given country, area. Such vital organizations are inhibiting in the district, where the people of the district are using financial institutions organized in Bedele town. Tourism is also considered as a smokeless industry that is free from any agent of urban pollutants. Development of tourism requires multifaceted and conducive improvement of infrastructures, which the Chewaka district lacks at current. Thus, as a result, the district is less attractive to tourists and it has also limited attractive tourism sites.