The Oromia State GOVERNMENT



Arsi Zone

Aseko Profile SOCIO-ECONOMIC PROFILE OF ASEKO DISTRICT

- Physical Characteristics:-Aseko (638.23 Km2) is the smallest district located in the eastern part of Arsi zone. It borders Golocha and W.Harerge in the east, Merti in the west, W,Harerge & Merti in the north and Chole and Golocha in the south (fig.2.). Aseko is the district capital. The district is characterized by rugged terrain & undulating plain. The altitude ranges from 1000 to 2900m with very high plateau. The major mountains are Weranbus, Abakoro and Dao. The major rivers are Arba, Dagnam Yelew and Bagdo. Kolla (tropical); Weina Dega (subtropical) and Dega (temperate) account for 26.1%, 25.5% & 48.4% of the area of the district respectively. Luvisol is the major type of soil in the district, which is very fertile & good for agriculture. Forest covered 17.1% of the area, of which only about 0.5% was manmade forest. The existing wild animals include monkey, pig, fox and antelope. There is no reserved areas for wildlife in the district.
- **Population:-** The district had a total population of 65,785 (1.8% urban). From the total population of the district 49.9% were females (52.1% of the urban and 49.0% of the rural). The crude population density was 103 person/km2. The age groups 0-14,15-64 and above 64 years were 50.7%, 46.4% and 2.9% respectively.

- There were 13 Farmers' Associations with 9669 member farmers in Aseko Agriculture:district. About 19.2%, 17.9% 17.1% and 45.7% of the total area of the district were cultivable land, pastureland, forest and shrub land and others respectively. Barley, wheat and sorghum are the dominant cereal crops grown in the district that mainly grow during Meher season. These crops are also grown during Belg season in the district. The major crop pests are stalk borer, aphids, cut worm, termite, boll worm and shoot fly. The crop diseases include rust, rot root, smut, late blight and downy mildew. Aseko is the least user of farm inputs in Arsi zone. About 769 guintals of fertilizers, 34.6 quintals of improved seeds & 200 liters of herbicides were distributed to farmers in the district. Cattle, small ruminants and equines accounted for 75.2% 33.4% and 9.4% of the 72613 livestock population in the district. It also had 35,052 poultry that accounted for 27% of the total poultry population in Arsi zone. There were 8837 traditional beehives in the district with a total production of 7,284 kgs of honey. The major livestock diseases are Blackleg, Anthrax, Lumpy skin, pneumonia, pasteurollosis and African horse sickness. In Aseko district, 11,060 livestock were vaccinated against different diseases.
- **Mining and Industry:-** There was mining activity in the district. There was only one grain mill registered in the district. Aseko is the disadvantaged district in industrial activities in Arsi zone.
- **Trade and Tourism:-** There were 83 licensed traders in the district, of which 71%, 26.5% and 2.5% were retailers, wholesalers and service giving traders respectively. Coffee, chat, banana and flax are the major local cash crops of the district. About 182 skins (number) were supplied to the central market from the district. Arbagugu state forest is an important tourist attraction site in the district.

Services:- The district was only accessible during the dry season. There was no telephone service in the district. Only 19% of the total population had access to potable water supply. The major sources of drinking water in order of their importance in the district are river, spring and pond. There was no electric supply in the district and firewood is the most important source of domestic energy followed by dung in the district. There was no fuel station in the district. There were 13 primary and one junior secondary school in the district with 114 teachers (1.8% females) & 4040 students (20.6%females). About 29.5% of the students were dropouts which indicates a high percentage of school leavers. The district had three clinics and four health assistants. The district had no veterinary clinic of any type.

Development Activities:- There was a 27 km long under construction from Abomsa to Aseko town. A health center was also under construction in the district.

Problems & potentialities:-Shortage of farmland and grazing land, high deforestation, insufficient supply of inputs, lack of transportation & communication infrastructures, shortage of trained development agents, absence of senior secondary school, shortage of educational materials and medical equipment are some of the problems of the district in addition to low productivity. On the other hand, the district has large livestock potential for its future development.

Digalu Tojo Profile

SOCIO-ECONOMIC PROFILE OF DIGALU TIJO DISTRICT

- Physical Characteristics:- Digalu Tojo district (981.25km2) is located in the south western Part of Arsi zone bordering Tiyo in the north, Hetosa in the north east, Tena in the east, Shirka in the south east, Limu Bilbio in the south and Munesa in the south west (fig.2.). Sagure is the district capital. The altitude ranges from 2500 to 3560m. Boraluku mountain (3560m) is the highest peak in the district. About 97% of the district is Dega (Badda) and Weina Dega (Badda Dare) agroclimatic zone covered only 3%. The main rivers are keter, Ashebeka and Gusha with length of about 78 km within the district. Chromic and Orthic Luvisols andChromic and Pellic Vertsols are the dominant soil types found in the district. Natural vegetation covered about 13.3% of the district. Some of the wild animals are Mountain Nyala, Fox, Ape, Monkey and Leopard. There is no wildlife conservation activity in the district.
- **Population:-** The district had a total population of 111,717 (7.7% urban) in 1997. Females accounted for 55% of the urban and 50.5% of the rural population. The economically active population (15-64 years) was 46.9% of the total population in the mentioned year. The crude population density of the district was about 114 persons per km2.
- Agriculture:- There were 22 Farmers' Associations with 14,096 members (13.8% females). There were also six Farmers' Service Cooperative in the district with 11,058 members (10.9% females). In the year indicated, 39.5%, 27.4%, 13.3% and 19.8% of Digalu Tijo's area were cultivated land, forest and shrub land and others respectively The average farmland holding size was about 2 hectares. About 17% of the peasants had no farmland of their own. Similarly, 16.5% of the peasants had no farm oxen. Cereals are the major crops produced

followed by pulses & oil seeds. Barley, wheat, horse bean, field pea, linseed and rape seed are the most important crops. Fallowing, crop rotation, manure and chemical fertilizers are employed to maintain soil fertility. About 59,943 quintals of fertilizers (57778 qu of DAP and 2,165 qu of Urea), 105 quintals of improved seeds and 178 liters of pesticides were distributed to farmers in the district. Data were not available regarding crop pests and diseases. However, similar pests and diseases found in the neighboring districts may be found in this district. There were 152,213 cattle, 82,691 sheep, 7112 goats, 16,950 horses, 759 mules, 10,030 donkeys and 34,478 poultry. There were also 935 traditional beehives with total production of 2,824.25 kg of honey. Blackleg, pasteurollosis and Anthrax are the major livestock diseases.

- **Mining and Industry:-** Construction materials (rocks) such as rhyolite and scoria are largely found in some parts of the district. In this district, there were 6 edible oil processing mills and 35 grain mills that employed 96 persons.
- **Trade and Tourism**:- There were 475 licensed traders in Digalu Tijo, of which 181 were wholesalers, 182 were retailers and 112 were service rendering enterprises. The most important agricultural product supplied to the local market is linseed. About 521 hides & 19,400 skins (number) were supplied to the central market. The mountains of the district with their wildlife have the potentialities of attracting tourists.
- **Services:-** There were 32 kms of all weather and 66 kms of dry weather roads in the district. It had one manual telephone station and one post office. About 33.3% of the urban and 11.2% of the rural population had access to potable water supply. The sources of drinking water in the district in order of their importance are rivers, springs, ponds and tap water. Firewood is the major source of domestic energy supply in both urban and rural areas of the district followed by gung. One town had electricity supply. There were 20 elementary and 5 junior secondary schools with 9686 elementary and 1192 junior secondary students. Females were 37.2% of the student population in

the district. About 13.1% of the students in the district were dropouts. The District had on health center and 3 clinics with one doctor, 4 nurses and 16 health assistants.

- **Development Activities:-**One Veterinary clinic and two residences of development agents were under construction in the district. A non-government organization known as SG-2000 was ruining some agricultural development programmes in the district.
- **Problems & Potentialities**:- Scarcity of cultivable land, deforestation, high prices of inputs, lack of credit lack of secondary school & low health coverage are some of the problems. It needs further study to know about the potentialities of the district. However, from the available data the district is rich in livestock population.

Dodota Sire Profile

SOCIO-ECONOMIC PROFILE OF DODOTA SIRE DISTRICT

Physical Characteristics:-Dodota Sire district is located in the north eastern part of Arsi zone with an area of 1139.27 km2. It shares borderline with East Shewa in the north, north west and north east, Hetosa and Tana districts in the south, East Shewa and Ziway-Dugda in the north west and Teju in the east (fig.2.). Dera is the district capital. The topography of the district is dominated by the Rift Valley. The altitude ranges from 1400 to 2500m with undulating plains, hills, mountains and degraded land area decreasing in elevation from south to north. The major rivers are Awash (40km), kelete (32 km) and Agamsa (8 km) within the district. Kolla, Weina Dega and Dega climatic zones accounted for 61%, 24.5% and 14.5% of the total area of the district respectively. The major soil types of the district are Cambisols (45%), Andosols (20%) and Lithosols (35%). Forest covered about 4846 hectares, which was about 4.25% of Dodota Sire district. The major wild animals are leopard, lion, monkey, fox and wild pig in the forest and other areas. Dilfakar is a game reserve area in the district.

- **Population:-** The total population of the district was 116,386 (21872 urban) in 1997. About 49.3% of the total population were females (51.5% in urban and 48.8 in rural). The economically active population (15-64) constituted 50.5% of the total population. The crude population density of the district was 102 persons per km2.
- **Agriculture:-** There were 26 Farmers' Associations in Dodota Sire district with 15,581 members of which 1,842 were females. Similarly, there were 16 Service Cooperatives in the district. About 23.2%, 10.6%, 4.3% and 42% of the district were cultivable land, pasture land, forestland and others respectively. The leading cereal crop is wheat followed by barley, teff and maize in production. Pulses & Oilseeds are also grown. About 7% of the farmers in the district had no farm oxen of their own. Crop rotation, manure, fallowing and chemical fertilizers are used to maintain soil fertility. About 17,789 quintals of fertilizers, (16,759 qu of DAP and 1028 qu of Urea) 487 quintals of improved seeds and 181 liters of herbicides were distributed to farmers in the district. The dominant crop pests are army worm, stalk borer and cut worm, while rust, smut, leaf blotch and chocolate spot are crop diseases. The district had 100,918 cattle, 37712 sheep, 32,208 goats, 2,928 horses, 420 mules, 13,297 donkeys, 56,972 poultry and 436 traditional beehives. Anthrax, Lampy skin diseases, pasteurollosis, sheep and goat pox and black-quarter are animal diseases.
- **Mining and Industry:-** The district is highly endowed with construction materials (rocks) like rhyolite, basalt, sand and scoria. However, traditional methods are used to utilize them. There are small scale industries such as grain mill, edible oil and brick (blocket) production. There were 4 edible oil mills, 35 grain mills and brick (blocket) factories in the district that employed about 177 persons.
- **Trade and Tourism:-**The total number of licensed traders in the district was 777 of which 22.9%, 50.7% and 26.4% were wholesalers, retailers and services and givers respectively. The major cash crops are haricot bean, onion, garlic & linseed. Dodota district shared about 4.3% of the total supply of hides & skins from Arsi zone to the central market. About 684 hides and 23752 skins (number) were supplied to the central market from the district in

the mentioned year. There is one game reserve in Dodota & some caves for tourist attractions.

- Services:-Dodota Sire had 51 km of all weather & 85 km of dry weather roads. Two towns, Dera (semi-automatic) and Sire (manual), had telephone services. About 35.2% of the population in the district was supplied with potable water. Pond is the main source of drinking water in rural areas of the district. Three towns (Dera, Awash Melkasa & Sire) had 24hours electricity supply. Firewood is the most important domestic energy supply both in urban & rural areas. Charcoal in Urban and dung in rural areas are the second most important sources of domestic energy supply in the district. There was one fuel station in the district. There were 22 elementary, 3 junior and one senior secondary schools with 336 teachers (20.2% females) and 8430 students (33.9% females). About 17.5% of the students were dropouts in the indicated year. There were 8 clinics and one health center with 7 nurses and 31 health assistants.
- **Development Activities**:-The constructions of two residences of development agents and a 25.5 km long road from Dera to Amude are the on going development activities in the district. The road will be completed in 1999.
- Problems & potentialities:- Scarcity of farm land and grazing land, soil erosion, deforestation, drought, high cost and delay in supply of inputs, lack of trained man-power, lack of transport and financial resources & lack of laboratory equipment constitute major problems. The district has irrigation potential in the lowland areas with fertile soil even though it is vulnerable to erosion hazard.

Gadab Asasa Profile

SOCIO-ECONOMIC PROFILE OF GADAB ASASA DISTRICT

- **Physical Characteristics**:- Gadab Asasa district is one of the 20 districts in Arsi zone with an area of 1075 km2 It has common boundaries with Limu Bilbilo in the north and the east, kofale in the west and Bale in the south (fig.2). Asasa is the district capital. The altitude ranges from 2000 to 4245m and Mt. Kaka (4245m) is the highest peak in the district. Woina Dega (65%) and Dega (35%) are the two agro-climatic zones of the district. Melka Wakena Dam is found in this district that covers about 816 hectares. Vertisol accounted for 82%, while Nitosol covered 18% of the district. Vegetation covered 399 hectares, of which 71.2% was natural vegetation and 28.8% was man-made forest. The major wild animals are Hyena, Fox and Mountain Nyala. There are no parks, reserved areas or sanctuaries for wildlife in the district.
- **Population:-** The total population of Gadab Asasa in 1997 was 129,270, of which 9.5% were urban dwellers. Females accounted for 50.8% of the population (50.9% of the urban & 50.8% of the rural). The crude population density was 120 persons per km2. The age groups 0-14, 15-54 and 65 years and above were 50.6% 46.7% and 2.7% respectively.
- Agriculture:- There were 25 Farmers' Associations with 21,373 members, of which 4270 (19.9%) were female farmers. Similarly, three were 4 Farmers' Service Cooperatives in the District with 4436 members farmers (638 females). About 76.90%, 17.30%, 0.37% and 5.43% of the total area of Gadab Asasa District were cultivable land, pasture land, forest and shrubland, and others respectively. The major annual crops grown are wheat, barely, field peas, horse beans and linseeds. Garadela and Temela are the two state farms in the district. Animal dung, fallowing and chemical fertilizes are used to maintain soil fertility in the district. Farm inputs such as fertilizers, improved seeds and herbicides are widely used in the district. About 12,440 quintals of fertilizers (9611 qu of DAP and 829 qu of Urea), 517 qu, improved seeds and

631 liters of herbicides were used by farmers in the district. The average farm size per household was 2.12 hectares. The major crop pests are cut worm, shoot fly, aphid, leaf worm and boll worm. Rust & smut are crop diseases. There were 125,925 cattle, 38005 sheep, 11,015 goats, 14734 horses, 562 mules, 9705 donkeys and 43,507 poultry. There were 5 modern and 1,143 traditional beehives in the district. The major livestock diseases are Anthrax, Blackleg and internal and external parasites.

- Mining & Industry:-Rock quarrying, sand exploitation and pottery activities are being conducted by the local communities. Edible oil mills, grain mills and brick (blocket) production were the types of small scale industries in the district. In Gadab Asasa, there were 2 oil milos, 22 grain and one brick (blocket) factory that employed 104 persons.
- **Trade & Tourism:-**There were 284 wholesalers, 216 retailers and 222 service giving merchants in Gadab Asasa district. The major local cash crop is linseed. The major exportable items supplied to the central market are hides and skins. Gadab Asasa, supplied 484 hides and 20,307 skins (number) to the central market in the mentioned year. Melka Wakena dam with its power station and Mount Kaka are tourist attracting sites in the district.
- **Services:** the district and 78 kms of all weather and 46 kms of dry weather roads. It had one manual telephone and one postal agent located in Asasa town. About 42.5% of the population in the district was supplied with potable water in 1996. The sources of drinking water in the district in order of their importance are river, spring, pond and tap water. All urban centers in the district have electricity supply, as Melka Wakena is located in the district. The leading domestic energy supply, however, is firewood in both urban and rural areas. The district had one fuel station (Mobil), but no banks or insurance organizations. There were 16 elementary, 2 junior and one senior secondary schools with t32 teachers (18% females(and 10,178 students (31.15% females). Dropouts were 15.4% of the students population in the district. There was

one veterinary clinic (type-B) in the district with one veterinary doctor, one assistant veterinarian and two animal health technicians in the mentioned year.

- **Development Activities**:- One health center, one health center, one health station, one elementary school and five development agents' residences were under construction.
- Problems and potentialities:- Shortage of farmland and pastureland, shortage of teaching materials and teacher, unemployment, uneven distribution of health intuitions, water born diseases are some of the problems. Melka Wakena can be used for finishing. Agro-Industries can also be developed in the area.

Gololcha Profile

SOCIO-ECONOMIC PROFILE OF GOLOLCHA DISTRICT

Physical Characteristics:- Gololcha district is located in the eastern part of Arsi zone with an area of 1775km2 which makes it the second largest district in the zone. It shares borderlines with Western Harerge in the east, Aseko and Chole in the north, Chole in the west and Amigna in the south (fig.2). Chencho (Debre Selam) is the district capital. The altitude of the district is mainly below 1500m. The major rivers in the district are Gololcha (50kms), mine (26 kms) and Daraba (37 kms). Kolla and Weina Dega account for 75% and 25% of the total area of the district respectively. The major types of soils in Gololcha are luvisols (50%), Cambisols (40%) and phaeozems (10%). The total area under vegetation cover accounted for 27.02% of the district. The existing major wild animals in Gololcha are Lion, Leopard, Pig, Monkey, Ape, porcupine, Fox & Antelope. There is no reserved area for wildlife in the district.

- **Population:-** The district had 126,034 inhabitants, of which only 2% were urban residents. Females constituted 49% of the total population of the district, 49.6% of the urban and 49.2% of the rural populations. The (15-64 Years) was 47.2% of the total population, while 0-14 years and 65 years and above accounted for 50.4% and 2.4% respectively.
- **Agriculture:**-In 35 Farmers' Associations of Gololcha district, there were 13,061 member farmers. There was no Service Cooperative in the district. Cultivable land was 20.6% of the district, while pasture land, forest and shrub land and others were 21.7%, 27% and 30.7% respectively. Sorghum and maize from cereals and Chat and Coffee from perennial crops are the major crops grown in the district. About 176.5 quintals of fertilizers, 21.81 quintals of improved seeds and 371 litres of herbicides were distributed to farmers in the district. It was the third least user of fertilizers next to Aseko and Tena districts in Arsi zone. The average farm size was 2.61 hectares. The average farm oxen per household was 3. Intercropping is a soil maintaining method used in the district. The major crop pests are stalk borer, termite, weevils and aphids, while the major crop diseases are rust, smut and coffee berry disease. There were 155,519 cattle, 56,527 small ruminants, 8,891 equines and 17,836 poultry. Traditional beehives were 39,239 with a total production of 29,101.5 kgs of honey. The main livestock diseases are Anthrax, Pasteurollosis, Blackleg, African horse sickness and lampy skin disease.
- **Mining & Industry**:-Sand and rhyolite are useful construction materials in the district Quarrying and pottery activities are widely practiced in Gololcha. Limestone and gypsum are also found in this district. There were four small scale industries (grain mills) with 10 employees in the district.
- **Trade & Tourism:**-About 195 licensed traders were found in Gololcha district, of which 18.5%, 65.6% and 15.9% were wholesalers, retailers and service giving traders respectively. Coffee, chat and fruits are the major local cash crops of the district. Coffee is also sent to the central market for export. The district has relatively large natural vegetation cover and rich wildlife that can attract tourists.

- Services:- In Gololcha district, Only a dry weather road (113 kms) was found. Telephone and postal services were non-existent in the district. It is one of the two district devoid of any clean drinking water supply in Arsi zone. The major sources of drinking water in order of their importance in the district are river, spring and pond. The majority of the population (98%) use firewood as their source of domestic energy supply. Kerosene & charcoal in urban and dung in rural areas are the other sources of energy supply. The district had no electricity supply, fuel stations, banks and insurance organizations. On the other hand there were 20 primary and 2 junior secondary schools with 133 teachers and 4766 students (17.7 females) in the district. About 21.8% of the students were drop-outs. There were 4 clinics and 12 health assistants in the district. The district had no veterinary clinic.
- **Development Activities**:- Rural road construction, the construction of four offices for agricultural development agents and primary school are the ongoing development activities in the district.
- Problems and Potentialities:- Soil erosion, lack of sufficient agricultural inputs, lack of transport services, water born diseases due to lack of potable water. Lack of teachers and a senior secondary school are some of the problems. The district is highly suitable for agricultural development through modern irrigation system.

Hetosa Profile SOCIO-ECONOMIC PROFILE OF HETOSA DISTRICT

- Physical Characteristics:- Hetosa district (1141.01 km2) is one of the twenty districts in Arsi zone bordered by Dodota Sire district and East Shewa zone in the north and north east, Tena, Dodota Sire and East Shewa in the east, Digalu and Tijo in the south, Tiyo in the south west and Ziway Dugda district in the west (fig.2). Iteya is the district capital. The topography of the district is Characterized by undulating plains, hills and gradually rising slope of land to Chilalo mountain and the gorge of Keleta river. The altitude ranges from 1500 to 4170m. The major rivers with their lengths within the district are Keleta (20 kms), Wedecha (8 kms) and Gonde (10 kms). Weina Dega and Dega agro-climatic zones accounted for 68% and 32% of the district respectively. The major soil types are vertisol (45%) and Andosol (35%) of the total areal coverage of the district. Vegetation covered about 1,010 hectares of land in the district. The existing major types of wild animals are Menelik Bush Buck, Monkey, Hyena, Fox, Rabbit, Forest Hog and Ape. There are no national parks, reserved areas or sanctuaries in the district.
- **Population:-** The population size of Hetosa was estimated to be 187,556 in 1997. The urban population was 12.7%. About 50.2% of the total population of the district were females (52.4% and 49.8% of urban & rural respectively). The crude population density of the district was 164 persons per km2. The age groups 0-14, 15-64 and above 64 years were 47.3%, 49% and 3.7% respectively.
- Agriculture:- In 37 Farmers' Associations of Hetosa district, there were 29,093 member farmers (12.1% females). There were also 11 Service Cooperatives with 18,182 member farmers (14% females) in the district. About 52.8% of the total area of the district was cultivable. Pastureland covered 16.3% of the area. Forest and shrub land constituted 28.1%. Cereals covered about 88%

of the cutivated land, followed by pulses 10.2% and oil seeds 1.8% during the Meher season. The uses of agricultural inputs are widely practiced in this district. About 34,539 quintals of fertilizers, 695 quintals of improved seeds and 827 litres of herbicides were distributed to farmers. About 11% of the farmers had no farm land, while 12% of the farmers had more than 4 hectares of farm land in the district. The average farmsize in hectares and number of farm oxen per household were 1.7 and 2 respectively. The major crop pests are aphid, stalk borers, cut worms and army worms, and the major crop diseases are rust, cover dumut and chacolate spots. There were 126,490 cattle, 65,205 small ruminants, 22,702 equines, 51,240 poultry and 2025 traditional beehives in the district. The main livestock diseases are Anthrax, pasturolosis, blackleg and sheep and goat pox.

- **Mining and Industry:-** Quarrying and pottery making are among the activities of the local community. There were 60 small scale industries, of which grain mills accounted for 78.3% of the small scale industries in the district. These small scale industries employed about 230 persons.
- **Trade and Tourism:-** There were1465 licensed traders in Hetosa district, of which 27.7%, 39.4% and 32.9% were wholesalers, retailers and service giving traders respectively. Onion, potato and sugar cane are the local cash crops in the district. Annole is a historical place in the district that can attract tourists.
- Services:- Hetosa had 161 kms of all weather and 68 kms of dry weather roads. Regarding postal and telecommunication services, two towns in the district (Eteya and Huruta) had both services in the mentioned year. About 55.3% of the total population of the district had potable water supply. The major sources of drinking water in the district in their order of importance are river, tap, spring and well. Two towns in the district had hydro –electric power supply. Fire wood is the most important source of domestic energy both in urban and rural areas. There were three fuel stations, one bank, but no insurance organizations in the district. There were 28 primary, 7 junior and

one senior secondary schools with 19,719 students and 596 teachers. About 18.5 % of the teachers and 38.5% of the students were females. About 11.9% of the students left schools before the end of the academic year. There were 8 clinics and 23 health assistants in the district. Similarly, there was one veterinary clinic of type-B in the district with one veterinary doctor and 4 health technicians.

- **Development Activities:-** The activities include the construction of houses for agricultural development agents, Lode Arfatu drinking water project, the construction of Huruta Health center and Gonde-Iteya drinking water supply and sanitation project.
- **Problems and Potentialities**:- Shortage of farmland, soil erosion, insufficient supply of agricultural inputs, shortage of schools, health institutions and skilled man power are some of the problems. On the other hand, Hetosa is suitable for the development of agro-industries as the district is known in its surplus production in Arsi zone.

Jeju Profile

SOCIO-ECONOMIC PROFILE OF JEJU DISTRICT

Physical Characteristics:- Located in the eastern part of Arsi zone, Jeju district (756.25 km2) borders Merti in the east, Dodola Sire in the west, Dodola Sire and East Shewa in the north and Sude in the south (fig.2). It is the second smallest district in area in the zone. Arboye is the seat of Jeju's district administration. Its altitude ranges from 1100m to 2700m above sea level. The major rivers within the district are Awash (50kms), Washaba (20 kms) and Wereso (30 kms). Kolla, Weina Dega and Dega agro-clmatic zones

account for 20%, 47% and 33% of the district respectively. Cambisols, lithosols and vertisols are the major soil types covering 61%, 29% and 10% of jeju district respectively. Forestland, woodland, shrub land and savanna are the types of vegetation in the district. Some of the wild animals are Monkey, Ape, Wild Pig, Fox, Antelope and Rabbit that depend on the declining natural vegetation in the area. There are no parks, reserved areas or sanctuaries in the district.

- **Population:-** The estimated population size of Jeju district was 95,222 and the urban population was 6.2% of the total in 1997. Females accounted for 49.2% of the district's population and 51.4% of the urban. The crude density of the district was 129 persons per km2. The economically active population (15-54years) was 48.6%, while 0-14 years and above 64 years were 47.3% and 3.7% respectively.
- Agriculture:-There were 22 Farmers' Associations with 11,560 member farmers (7.8% females) and 6 Service Cooperatives with 9448 members (8.2% females) It was estimated that 65.2% of the district was cultivable land, 17.7% was pastureland, 6.3% was forest land shrub land and 10.8% was barren and others in the indicated year. Cereals, pulses & oil seeds are widely grown. Wheat & barley are the major cereal crops produced in Jeju district both in belg & meher seasons. Tibila and Addis Hiywot are large scale farms in the district. About 13581 quintals of fertilizers (4.5% of the zone), 197 quintals of improved seeds and 082 liters of herbicides were applied on plots of farmers in the district. Methods of maintaining soil fertility in the district are intercropping, fallowing and burning of straw on the farm land. The major crop pests are army worm, aphids, African ball worm, stalk borer and locust, while rust, blight, root rot and smut are the major crop diseases. There were 23,931 cattle, 82,799 small ruminants and 13,969 equines in the district. There were also 22,033 poultry and 1,842 beehives (one modern). Blackleg, pasteurollosis, Anthrax, sheep pox, lumpy skin disease, liver fluke, mangmites and mastitis are the common animal diseases in the district.

- **Mining and Industry:-** Sand and rhuyolite are used for construction purposes. Quarrying and pottery making activities are widely undertaken by the community. Regarding industrial activities in the district, there were 34 grain mills and one edible oil mill in the district that employed about 87 persons.
- **Trade and Tourism**:- Of the 275 licensed traders in Jeju district, 42%, 44% and 14% were wholesalers, retailers and service giving traders respectively. Field pea, rape seed, linseed, haricot bean and chat are the major local cash crops of the district. About 275 hides and 3250 skins (number) were supplied to the central market from the district. Gara Jeben, kabi Abba Ganna and Anjo are some of the historical sites for tourist attractions in the district.
- A dry weather road of 24 kms existed in Jeju district, but telephone and Services:postal services were non-existent. About 22.7% of the total population had access to potable water supply. The major sources of drinking water in the district in order of their importance are river/pond, un protected well/spring, tap, and protected spring/well. Only Arboye town had electric power service of four hours per day from a diesel generator. Based on the 1994 census report, 63.5% and 35.9% of the households used firewood and dung respectively. Jeju had no fuel stations, banks and insurance organizations in the mentioned year. There were 20 primary, 3 junior and one senior secondary schools in the district with 190 teachers (12.6% females) and 7, 387 students (24.2% females). Dropouts accounted for 18.7% of the student population in the district. On the other hand, a health center and 8 clinics with 4 nurses and 13 health assistants were rendering medical services to the community. The district had one veterinary clinic with 3 animal health technicians.
- Development Activities:- A road was under construction from Tibila State farm to Arboye Agricultural development agent houses were also under construction in the district.

Problems and potentialities:- Some of the problems include shortage of grazing land farm lands, soil erosion, deforestation, lack of transportation, high costs of fertilizers, shortage of teachers & education materials, inadequacy of health personnel and unemployment. However, land suitable for irrigation is available in the moisture deficit lowland areas of the district.

Kofele Profile

SOCIO-ECONOMIC PROFILE OF KOFELE DISTRICT

Physical Characteristics:-Kofele district shares boundary lines with Gedeb Asasa in the east, East shewa and Southern peoples Regional State in the west, Munesa in the north and Bale in the south (fig.2). The total area of the district is 1200 km2. Kofele is the district capital. The altitude that ranges from 2000 to 3050 is characterized by plains, hills, valleys and gorges. About 98% of the district is Dega, while only 2% is Weina Dega. The major peak in the district is Duro (3050m). The three permanent rivers within the district are Anjelelo (35 kms), Totalamo (30 kms) and Ashoka (35 kms). The drainage pattern of these rivers is towards the Wabi-Shebele drainage basin. The major soil are Eutric Nitosols (65%) Chromic and Pellic vertisols (19%) and Orthic Acrisols (12%). Vegetation covered about 3,558 hectares, 2.96% of the total area of land in the district. The major types of wild animals include Leopard, Fox, Rabbit, Monkey and Ape. Different types of birds also exist in the area. There are no parks, reserved areas of sanctuaries for wildlife in the district.

- **Population:-** Based on the 1994 census, the estimated population of Kofele district in 1997 was 192,700, of which 7% were urban residents. The female population constituted 50.2% of the total population. The age groups 0-14, 15-64 and 65 and above years were 53.06%, 44.6% and 2.34% respectively. The crude population density of the district was 161 persons per km2.
- **Agriculture:-**There were 55 Farmers' Associations with 21,083 member farmers (18% females) and 6 Service Cooperatives composed of 8466 members (13,6% females) in kofele district. About 30%, 29%, 2.9% and 38.1% of the total area were cultivable land, pasture land, Forest and shrub land and others respectively. Barley, wheat and maize are the dominant cereals during the long rainy season. Horse beans and field peas are the major pulses produced. The average farm size in hectares and number of farm oxen per household were 1.68 and 2 respectively. There are no state and privately owned large scale farm in the district. About 8,508 guintals of fertilizers (6,273 gu of DAP and 2,235 gt of Urea) 188 guintals of improved seeds and 188 liters of pesticides were distributed to farmers in the district. Fallowing, crop rotation, application of animal manure and crop residue are protected in the district to maintain soil fertility. Aphids, shoot fly, chafer graph, African boll worm and cut worm are crop pests, while rust, chocolate spot and blight are crop diseases. Even though the livestock population is declining, the district had 349,937 cattle, 112,045 sheep,6924 goats, 31744 horses,882 mules, 3399 donkey and 78,559 poultry. There were 14,420 beehives with a total production of 43,052 kgs of honey. Regarding animal diseases, internal and external parasites, Blackleg, pasteurollosis, Anthrax and African horse sickness re the commonly prevalent diseases in the area.
- **Mining and Industry**:- Construction materials such as scoria and rhyolite are available in the district. There were 35 grain mills, one oil mill and one wood-work small scale industries in Kofele district that employed about 103 persons.

- **Trade and Tourism**:- The district had 991 licensed traders, of which 162 (16%) were whole sealers, 253 (26%) were retailers and 576 (58%) were service giving traders. The major local cash crops are vegetables, while the major-exportable items are hides and skins. About 132,540 skins (number) were supplied to the central market from the district. Even though there is no significant tourist attraction site in the district, if the natural vegetation and wildlife are protected well, they can attract tourists to the area in the future.
- Services:-Transport and communication infrastructures are poorly developed in Kofele district. On the 77 kms long road in the district, 65 km was all weather road and 12 km was dry weather road. There were 2 telephone stations and an agent post office in the district. About 9.3% of the total population in the district was supplied with potable water. The sources of drinking water in the district in their order of importance are river, spring, well and tap water. The major source of energy supply for both urban and rural population is firewood. The district had electricity supply. However, there were no fuel stations, bank and insurance organizations in the district. There were 21 elementary, 2 junior and one senior secondary schools with 281 teachers (18.9% females) and 12,822 students (12.1% females) in the district. The gross enrollments in primary, junior secondary and senior secondary schools of the district were 31% and 7% respectively. About 14.9% of the students left schools before the end of the academic year. There were 10 clinics and 15 health assistants in the district. The district had also one veterinary clinic of type B with one veterinary doctor and five other animal health personnel.
- **Development Activities**:- Maintenance of a 29 km long road by Oromiya Regional State, health center construction in Kofele town funded by ESRDF (90%) and ODA (10)%) and house and office construction for development agents funded by Oromiya Regional State were the on-going development activities in the district.

Problems and Potentialities:- Land degradation, shortage of farm land, high input cost, poor transportation, shortage of teachers and health personnel & unemployment are some of the problems in the district. However, the district has high potential for livestock rearing.

Merti Profile

SOCIO-ECONOMIC PROFILE OF MERTI DISTRICT

- Physical Characteristics:-Merti is one of the twenty districts of Arsi located in the eastern part of the zone with an area of 1426.58 km2. It borders western Harerge and East Shewa zones and Aseko, Jaju, Chole and Sude districts (fig.2). Abomsa is the center for the district's administration. Merti is characterized by undulating plains, hills and high plateaus with altitudinal ranges from 1000m to 3280 m. The major mountain peaks are Gora (3280m), Welergi (3114m) and Gara Sirri (1920m). The major rivers within the district are Awash (65kms), Arba Dima (98 kms), Arba Guracha (88 kms) and Homba (35 kms). Dega, Weinadega and Kolla accounted for 19%, 26% and 55% of the district respectively. The Areal coverage of the major soils, Cambisols, Lithosols, Luvisols and Phaezems, were 40%, 30%, 15% and 15% respectively. Vegetation Coverage of the district was about 37978 hectares, of which forests covered about 18,360 hectares. Some of the wild animals are Monkey, Ape, Wild pig, Fox, Antelope and Rabbit. There are no parks, reserved areas or sanctuaries for wildlife in Merti district.
- Population:- Merti, with a total population of 101,191 in 1997, had an urban population of 16.2%. Of the total population in the district, females were 49.9% (52.3% urban and 49.3% rural). The crude population density was 71 persons per km2. The economically active age- group (15-64) was 48.9%, while 47.4% and 3.7% were the economically dependent population of the age groups 0-14 and above 64 years respectively.

- Merti had 25 Farmers' Associations with 14,179 member farmers (8.2% **Agriculture:**females). It had also 4 Service Cooperatives comprising 6958 members of which females were 6.2%. About 28% of the total area of the district was cultivable, of which 71.3% was cultivated. Pastureland covered about 39%, while vegetation covered 27% of the district in the indicated year. Wheat and barley are the major cereal crops produced in the district. Fallowing, crop rotation, manuring and intercropping are practiced in the district to maintain soil fertility. About 6,117 guintals of fertilizers, 311 guintals of improved seeds and 819 litres of herbicides were used by farmers in Merti. The average farmland size per household was 3 hectares, but about 6% of the farmers in the district did not have farm plots of their own. The average farm oxen per household in the district was 2, but about 8% of the farmers in the district had no farm oxen. The major crop pests are aphids, stalk borer, army worm, termites, locust and birds, while rust, smut and root rot are crop diseases. The total number of cattle, small ruminants and equines were 56,198, 29,632 and 96,743 respectively. There were also 13,634 poultry and 6,899 beehives (one modern) in the indicated year. The common livestock diseases in the district are Blackleg, Liver fluke, Anthrax and African horse sickness.
- **Mining and Industry**:-Quarrying and pottery making are practiced in the area. Rhyolite is being used for construction purposes. There were 61 small scale industries dominated by grain mills (95%) that employed 178 persons.
- **Trade and Tourism**:- A total of 727 licensed traders were found in Merti district. Wholesalers, retailers and service givers were 17.6%, 42.4% and 40% respectively. Linseed and teff are the major local cash crops. A total of 36,043 skins (number) were supplied to the central market from the district. Fara Kasa piligrimage center and Arbagugu state forest are the major tourist attractions in the district.

- Services:-The total length of road in the district was 253 kms, of which 41.5% was all weather road. Abomsa town had a semi-automatic telephone service and a post office. Potable water supply of the district was for about 22.7% of the total population. The sources of drinking water in the district in their order of importance are river/pond, unporotected well/spring, tap-water and protected spring/well. Abomsa was the only town that had 24 hours electric supply in the district. Firewood is the main source of domestic energy both in urban and rural areas. The district had one fuel station, one commercial bank but no insurance organizations. One senior secondary, 4 junior and 24 elementary schools were functioning with the enrolment of 13,125 students and 395 teaching staffs. Female teachers and students were 21% and 33.8% respectively. About 11.8% of the students were dropouts in the indicated academic year. There were 3 clinics and one health center with one medical doctor, 8 nurses and 37 health assistants. Likewise, there was one veterinary clinic (type B) with one veterinary doctor and three animal health technicians in the district in the mentioned year.
- **Development Activities:-** The constructions of agricultural development agent houses and offices, Abomsa-Moye and Merti-Aseko roads are going on in the district.
- Problems and Potentialities:- Some of the problems are shortage of farm land and grazing land, soil erosion, shortage and high costs of inputs, lack of education materials, shortage of health personnel and unemployment. However, the district is highly suitable for farming activities based on irrigation.

Munessa Profile

SOCIO-ECONOMIC PROFILE OF MUNESA DISTRICT

- **Physical Characteristics:-**Munesa district is one of the twenty administrative units of Arsi zone with an area of 1418.75 km2. It is bordered by Ziway Dugda and Tiyo in the north, Digalu Tijo in the north east, Kofele in the south ad Limu Bilbilo in the east (fig.2). Kersa is the district capital. The district is Characterized by flat plains, valleys and few high mountain peaks such as Chige and Kulsa with altitudinal ranges from 1500 to 4000m. Munesa is rich in permanent rivers that flow to the Rift Valley. These rivers are Kessa (45km), Teji (50km), Guracho (60kms), Gadamsa (60kms) and Metna (55km). The three climatic zones of the district are Dega (50%), Weina Dega (42%) and Kolla (8%). The major soil types of the district are Vertisols (60%), Luvisols (20%) and Combisols (20%). About 49,094 hectares of land was covered by vegetation and man-made forest accounted for 6.37% of the vegetation cover. Monkey, Ape, Antelope, pigs and Nyala are some of the wildlife in the district. There are no parks, reserved areas or sanctuaries for wildlife in Munesa.
- **Population:-** The district had a total population of 158,741 in 1997, with an urban population of 6.94%. About 49.5% of the total population of Munesa district were females (52.9% urban & 50.4% rural). The crude population density was 112 persons per km2. The age groups 0-14, 15-64 and 65 years and above were 51.24%, 45.7 and 3.05% respectively.
- Agriculture:- There were 15,870 member farmers in 38 Farmers' Associations of the district, of which 11.1% were females. Similarly, there were 5 Service Cooperatives with 6911 member farmers (10.8% females). About 37.06% of the district can be cultivable and the uncultivated was 10.94%. Pastureland was 24.09%, while forest, bush land and shrub land covered 34.6% in the indicated year. Barley was the leading cereal crop both in areal coverage and

production followed by wheat in Munesa district. Wheat and rapeseed were the major crops grown by Lole state farm in the district. Crop rotation, fallowing, dung and chemical fertilizers are employed to keep soil fertility. A total of 24,118 quintals of fertilizers (22,604 qt of DAP and 1,514 qt of Urea), 60 quintals of improved seeds and 3,994 liters of herbicides were distributed to farmers. The average farm size in hectares and number of farm oxen per house hold were 2.5 and 1.5 respectively. Abut 5% of the farmers in the district had no farm oxen of their own. The major crop pests are army worn, aphid, red ants and shoot fly. Rust, smut and fungi are the major crop diseases. There were 135,750 cattle, 61,574 sheep, 22960 goats, 19368 horses, 777 mules, 8848 donkeys, 475,076 poultry, and 9999 beehives (3 modern). Major livestock diseases are Blackleg, Anthrax, Pasteurelosis, Internal and External Parasites and African house sickness.

- **Mining and Industry:-**Quarrying, and exploitation along the shore of Lake Langano are pottery making by the local communities. Grain milling was the only small scale industry in the district. There were 29 grain mills in the district that employed 78 persons.
- **Trade and Tourism:-** There were 910 licensed traders in Munesa district, of which 15.7% were wholesalers, 30.9% were retailers and 53.3% were service rendering merchants. The major local cash crops are linseed and rape seed. Hides and skins are the major export items supplied to the central market. Hence, 256 hides and 17,189 skins (number) were supplied to the central market from the district. The beautiful scenery around Lake Langano and Dagaga state forest are tourist attraction areas.
- Services:- Munesa district had 98 kms of all weather and 105 kms of dry weather roads. Regarding communication, there were one manual telephone station ad an agent post office in the district. Only 4.92% of the total population of the district were supplied with potable water. The sources of drinking water in the district in their order of importance are river, pond, spring and tap-

water. Kersa was the only town supplied with electricity from a diesel generator for 4 hours per day. Firewood is the major source of domestic energy both in urban and rural areas. There were no fuel stations, banks and insurance organizations in the district. There were 19 elementary, 3 junior and one senior secondary schools in the district with 12,963 students and 274 teachers, of which 16.8% and 26.7% were female teachers and students respectively. About 19.5% of the students were dropouts. There were 10 clinics, 3 nurses and 20 health assistants serving the entire population of Munesa district. Similarly, there was one veterinary clinic (type C) with one assistant veterinarian and three animal health technicians in the indicated year.

- **Development Activities**:- The on-going projects in the district are the constructions of 3 irrigation projects, 2 elementary schools (1-4) and 4 agricultural development projects.
- Problems and Potentialities:- Shortage of farm land, deforestation, delay in input supply, lack of credit, shortage of teachers, uneven distribution of health institutions and unemployment are some of the problems. One the other hand, the district has high potential for fishery and the development of recreational facilities as part of Lake Langano is within the district.

Robe Profile

SOCIO-ECONOMIC PROFILE OF ROBE DISTRICT

Physical Characteristics:- Being one of the administrative units found in the eastern part of Arsi zone, Robe district has an area of 1237.5 km2. It borders Bale zone, Amigna, Shirka, Tena, Sude and Seru districts (fig.2). Robe town is the district's administration. The altitude of the district ranges from 1200 to 4000m with flat plains, valleys and gorges. Dega, Weina Dega and Kolla constituted 80%, 12% and 8% of the district's total area respectively. Robe (80 kms), Hulull (45 kms) and Wabe (40 kms) are the permanent rivers. The major soil types in the district are Vertisols (67%), Lithosols (27%), and Nitosols (6%). About 16% of the total area of the district was covered with forest, bush and shrub land. The major wild animals are Monkey, Hyena, Baboon and Fox. There is no reserved area for wildlife in the district.

- **Population:-** The estimated population of the district was 127,331 in 19997 with an urban population of 11.4%. The female population constituted 50.2% of the total population, 53.4% of the urban and 49.7% of the rural in the mentioned year. The crude population density was 103 persons per km2. The economically active population (15-64 years) was 48% of the total population, while 0-14 and above 64 years (the dependent population) were 48.3% and 3.7% respectively.
- Agriculture:- In 28 Farmers' Associations of Robe district, there were 15,116 member farmers, of which 8.5% were females. Similarly, there were 10 Service Cooperative with 14,471 members (10.3% females) in the indicated year. Cultivable land was 51.1% of the total area. About 4.9% was pasture land. Forest, shrub and bush land covered 16.3%. Wheat, teff and barely are the major cereal crops grown. Robe is one of the major oil seeds production district in Arsi zone. Animal dung application, crop rotation and chemical fertilizers are practiced to maintain soil fertility. A total of 12.727 quintals of fertilizers (12075.5 qu of DAP and 651.5 qu of Urea), 165.55 quintals of improved seeds and 1324 liters of herbicides were distributed to farmers. The average farmsize in hectares and member of farm oxen per household

were 2.5 and 2 respectively. However, 25% of the farmers in the district had no farm oxen of their own in the indicated year. Army worm, cut worm, stalk borer, African boll worm, aphids, weevils, rats, monkey and birds are major crop pests. The major crop diseases are rust, smut, root disease, powder mildew and downy mildew. There were 136,638 cattle, 25,449 sheep, 13,969 goats, 4788 horses, 2269 mules, 11840 donkeys, 34,992 poultry and 3697 beehives (3 modern) in the district. The major livestock diseases are blackleg, anthrax, fasholosis, pasteurelosis, lumpy skin disease, African hors sickness and ulcerative lymphangitis.

- Mining and Industry:- Except rock quarrying for construction and pottery making clay by the local communities, no mining activities have been under taken in the district. There were 38 small scale industries in Robe district, of which grain mills accounted for 92.1% of small scale industries. These small scale industries employed 93 persons in the indicated year.
- **Trade and Tourism:-** The total number of licensed traders in the district was 1160, of which 32.8%, 42.2% and 19.0% were wholesalers, retailers and service giving traders. The major local cash crops are flax, nueg and rape seed. A total of 26974 skins of sheep and goats were supplied to the central market from the district. There are beautiful sceneries like Wabe gorges in the district that can attract tourists.
- Services:- The district had 44 kms of all weather, 36 kms of dry weather and 75 kms of feeder roads. Robe was the only town in the district with a manual telephone station and a office. About 19.5% of the total population of the district was supplied with potable water. The sources of drinking water in the district in their order of importance are pond, well, spring, river and tap-water. Robe town also had electricity supply of 4 hours per day from a diesel generator. Firewood is the major source of domestic energy both in urban and rural areas. There were two) shell & Ajip) fuel stations and one commercial bank, but no insurance organizations in the district. In Robe district, 28

elementary, 3 junior and one senior secondary schools had 9,125 students and 402 teachers. Female teachers and students were 20>2% and 29.3% respectively. About 23.32% of the students were dropouts in the same academic year. The district had one health center & 11 clinics with one doctor, 10 nurses and 17 health assistants. Similarly there was one veterinary clinic (type B) with one veterinary doctor, two assistant veterinarians and three health technicians.

- **Development Activities**:- The development activities in the district are the constructions of one rural road (54 kms long), one water supply project and residence house for rural agricultural development agent.
- Problems and potentialities:- Some of the problems are shortage of farm land and grazing land, deforestation, high prices of inputs, shortages of development agents, school equipment, and health personnel, and unemployment. However, the areas along the banks of the rivers in the district are highly suitable for irrigation.

Seru Profile

SOCIO-ECONOMIC PROFILE OF SERU DISTRICT

Physical Characteristics:- Seru district, having an area of 2320.49 km2, is bordered by Amegna district in the north, north east and north west, Robe in the west and south west, Bale in the south and south east, and West Harerge in the east (fig.2). Seru is the district capital. It is characterized by undulating

plains, cliffs and ups and downs with altitudes ranging from 950 to 2500m. Abul Kasim is the highest peak and Wabe valley is the lowest place in the district. The three agro-climatic zones of the district are Dega (2%), Weina Dega (33%) and Kolla (65%). Wabe river is the major river that flows for 50 kms along the border of the district and the other rivers are Darro (70 kms) and Waji (25 kms). The major soil types in the district are vertisol (35%), luvisol (55%), cambisol (10%) and andosol (5%). Vegetation (forest, woodland, shrub and bush land) covered about 33% of the total area of the district. However, forest (natural & man-made) covered only 4% of the district. Lion, leopard, fox, hyena warthog, duiker, pig, bush buck, monkey and ape are some of the wild animals. There are no parks, reserved areas or sanctuaries in the district.

- **Population:-** There were 4,890 urban (5.7% of total) and 81,224 rural population in the district in 1997. Females were 55.4% of the urban, 49.9% of the rural and 50.2% of the total population in the same year. The crude population density was 37 persons per km2. The age groups 0-14, 15-64 and above 64 years were 49.0%, 47.4% and 3.6% respectively.
- Agriculture:- Seru district had 27 Farmers' Associations and 5 Service Cooperatives with 13,573 and 10,496 member farmers, of which females were 8.9% and 4.9% respectively. About 19.8% of Seru's total area was cultivable and 66.2% of it was cultivated. Pasture land, forest, bush and shrub land, and others were 21.8%, 32.9% and 25.5% of the district respectively. Wheat, maize, teff and barley are the major cereal crops grown. Moreover, Seru district is one of the major wheat producing districts of Arsi Zone. Crop rotation, animal dung and chemical fertilizers are employed to maintain soil fertility. To this effect, about 12,252 quintals of fertilizers (11,075.6 qt of DAP and 1,176.3 qt of Urea) were used by farmers in the district. About 350 quintals of improved seeds were also distributed to farmers. The average farm size in hectares and number of farm oxen per house hold were 1.95 and 1.45 respectively. On the other hand, 20% of the farmers in the district had no farm oxen in

the mentioned year. The major crop pests are stalk borer and aphids; while the major crop disease is rust. There were 153,412 cattle, 27,487 sheep, 15,231 goats, 3,407 horses, 490 mules, 7,322 donkeys, 232 camels and 40,053 poultry in the district. There were also 2,115 beehives (97modern) with total production of 10,005 kgs of honey in the indicated year. Anthrax, blackleg, lumpy skin disease, tripanosomiasis are livestock diseases in the district.

- Mining and Industry:- Quarrying and pottery making are practiced in the district. Grain milling was the only small scale industry in Seru district. There were 16 grain mills in the district. The grain mills employed 45 persons in the mentioned year.
- Trade and Tourism: Of the 269 licensed traders in Sebu district, 26% were wholesalers, 57.6% were retailers and 16.4% were service giving merchants. The major local cash crops of the district are Coffee and Chat. The major exportable items supplied to the central market are skins of sheep and goats. A total of 23,054 skins (number) were sent to the central market. The beautiful sceneries in Seru district and cultural places such as Arba Liji cave and Mosque can attract tourists.
- Services:- The total road length in the district was 65 kms, of which all weather road was 34 kms. Except radio communication for administrative purposes, there were no other communication services in the district. Spring, pond, river and well are the major sources of drinking water in their order of importance in the district. About 14.1% of the district's population had potable water supply. There was no electricity supply in the district in the indicated year. Firewood is the major source of domestic energy supply in the district. There were no fuel stations, banks and insurance organizations in Seru district. The district had 11 elementary and 2 junior schools. There were 4,851 students (18.5% females) and 148 teachers (9.5% females). About 29.8% of the students were dropouts in the same academic year. There were 10 clinics

with 12 health assistants in the district. Likewise, there was one veterinary clinic (type C) in the district with one animal health assistant and 3 animal health technicians in the mentioned year.

Development Activities:- One health post, one elementary school (1-4) and two development agent residence houses were under construction in the district.

Problems and Potentialities:- Some of the problems include shortage of farmland and grazing land in Dega area, shortage of rain in Kolla area, deforestation, shortage of classrooms and teachers, high dropout rate, shortage of health personnel and budget, and unemployment. However, there is virgin land in Kolla areas for growing drought resistant crops. There is also irrigable land along river banks in the district.

Shirka Profile

SOCIO-ECONOMIC PROFILE OF SHIRKA DISTRICT

Physical Characteristics:- Shirka district (1456.25 km2) shares boundary lines with Robe Tena, Digelu Tijo, Limu and Bilbilo district and Bale zone (fig.2). Gobesa is the district capital. It is Characterized by plains, valleys, hills and mountainous terrain. The altitude of the district ranges from 1350 to 350m. The district is composed of 8% Wirch (Alpine), 20% Dega (Temperate) and, 37% Weina Dega (sub-tropical) and 35% kolla (tropical) agro climatic zones. Gumelo and Rapesa are the two perennial rivers which are 25 kms and 20 kms long within the district respectively. The major soil types are Rendzinas Haplic and Luvic Phaeozems (49%), Chromic and Pellic Vertisols (33%) and Chromic and orthic Luvisols (18%). Forestland was about 1.4% of the total area of the district. Some of the existing wild animals are red fox, hyena, pig and rabbit. There is no reserved area for wildlife conservation in the district.

- Population:- Shirka district had 7494 urban (52.8% females) and 113,358 rural (49.7% females) population in 1997. The urban population was only 6.2% of the total population in the district. Population density of the district was 83 persons per km2. The economically active population (15-64 years) was 45.6%. The age groups 0-14 and above 64 years (the dependent population) were 50.5% and 3.9% respectively.
- Agriculture:-The district had 32 Farmers' Associations with 14,991 member farmers (7% females). There were also 6 Farmers' Service Cooperatives holding 14,315 members (6.7% females) in the district. About 21.4% of the land in the district was cultivable, 6.3% was pastureland, while forest, shrub and woodland, and others constituted 2.7% and 69.6% respectively. Wheat, barely and teff are the dominant cereals and horse bean and field pea are the major pulses produced in the district. Fallowing, crop rotation and application of animal manure are traditional soil maintaining methods in the district. The average farm size in hectares and number of farm oxen per house hold were 2 each and 8.6% of the farmers in the district had no farm oxen. Farm inputs are widely practiced in the district. About 12,241 quintals of fertilizers (11,389 qts of DAP and 852 qts of Urea), about 185 quintals of improved seeds, 1,161 liters of herbicides were used by farmers. Army worm, aphid stalk borer, grasshopper and boll worm are the major crop pests and rust, smut and chocolate spots are the major crop diseases. The district had 16,8126 cattle, 39,664 sheep, 40,048 goats, 8,069 horses, 5,054 mules and 11,631 donkeys. There were also 49,895 poultry and 7,220 beehives in the district. Anthrax, blackleg, pasteurelosis, and internal and external parasites are the major livestock.
- Mining and Industry:- Construction materials such as sand stones are available in different parts of the district. Regarding industrial activities, there were 10 grain mills in Shirka district that employed 31 persons.

- Trade and Tourism:- The number of licensed traders in Shirka district was 671, of which 23%were wholesalers, 40% were retailers and 36% were service giving traders. The major local cash crop are pepper, black and white cumin and fenugreek. Hides and skins are exportable items. About 23,470 skins (number) were supplied to the central market. Even though the district does not have major tourist attraction centers, the chains of mountains and available forests with there wildlife can attract tourists.
- Service:-In Shirka district, 22 kms of all weather and 77 kms of dry weather roads were providing poor services due to lack of maintenance since their construction. There one manual telephone station and an agent post office in the district. About 51.1% of the total population in the district was supplied with potable water. The sources of drinking water for the remaining population are river, spring and pond in order of their importance in the district. The district had no electricity supply and fuel stations. Firewood is the major source of domestic energy supply in the district. There were no banks and insurance organization in Shirka district. There were 18 elementary and 2 junior secondary schools comprising 251 teachers (17.5%) females) and 7054 students (22.7% females) About 7.8% of the students left schools before the end of the academic year. The health institutions in the district were one health center and five clinics with 5 nurses and 20 health assistants in the indicated year. The district had one veterinary clinic (type C) with 3 animal health assistants.
- Development Activities:- Veterinary clinic construction, survey and designing of the 34 kms road from Bokoji to Gobesa and 15 kms road from Gobesa to Tareta and the constructions of an elementary school and 4 houses and offices for development agents are taking place in the district.
- Problems and potentialities:- Some of the problems include shortage of farmland and grazing land, deforestation, soil erosion, shortage of teachers and lack of a secondary school, inadequacy of health personnel, and unemployment. On

the other hand, the lowland areas of the district can be used for irrigation and the areas surrounding the mountains are suitable for livestock development in the district.

Sude Profile

SOCIO-ECONOMIC PROFILE OF SUDE DISTRICT

- Physical Characteristics:-Sude district (1269.12km2) is bordered by Chole district in the east and north east, Amigna in the south and south east, Robe in the south west, Tena and Dodota Sire in the west and Jeju and Merti district in the north (fig.2). Kula town is the administrative center of the district. The altitude ranges from 1800 to 3500m with plains, valleys, gorges and hills characterizing the topography. Dega and Weina Dega agro climatic zones covered 8% and 92% of the district respectively. The two perennial rivers are Magha, and Goleand Dera which are 40 kms and 25 kms long within the district respectively. The major soil types in the district are Chromic and Pellic Vertisole (55%) and Rendzinas, Haplic and Luvic Phaeozems (45%). Forestland in the district covered 10,445 hectares, of which 98% was natural and 2% was man-made. Some of the existing wild animals have disappeared due to the destruction of the forest in the area. The wild animals in the district include leopard, fox, hyena, baboon and pig. There is no reserved area for wildlife in the district.
- Population:- The total population of Sude district in 1997 was 121,514, of which 1.4% were urban residents. Females constituted 49.9% of the total population (53.2% of the urban and 49.9% of the rural). The crude population density of the district was 96 persons per km2. The age groups 0-14, 15-64 and above 64 years 49.4%, 47.5% and 3.1% respectively. Agriculture:- The 27

Farmers' Associations that existed in the district had 16,165 member farmers, of which 8% were females. Similarly, there were 8 Farmers' Services Cooperatives with 12,687 members (8.2% females) in the mentioned year. Regarding land use in the district, 37% was cultivable land, 27% was pastureland, 10% was forest, shrub land and woodland, and others accounted for the remaining 26% of the total area of the district. Wheat, barley and teff from cereals and horse bean and field pea from pulses are the dominant crops. The district is also known in producing niger need and linseed. Diksis farm is a medium sized state farm in the district. Traditional soil maintaining methods practiced in the district include fallowing, crop rotation and manuring. Farm input utilization is widely practiced. Fertilizers and improved seeds distributed to r]farmers in guintals were 8,594 and 341 respectively. About 648 liters of herbicides were also distributed to farmers. The average farm size was 2.7 hectares and the average number of farm oxen per household was 2 in the indicated year. However, 22.1% and 5% of the farmers had no farm oxen and farmland respectively. Aphids, beetles and stalk borer are some of the crop pests, while late blight, early blight and rust are some of the crop diseases in the district. There were 16,4471 cattle, 67,228 sheep, 15,480 goats, 8,062 horses, 2,944 mules, 9,936 donkeys, 58,492 poultry and 1,858 traditional beehives. The major livestock diseases in the district are blackleg, trypanosomiasis, pastorelosis and malignant cattle fever.

- Mining and Industry:- Construction materials such as rhyolites are available in the district. Regarding industrial activities, there were 11 privately owned grain mills in Sude district that employed 23 persons.
- Trade and Tourism:- There were 220 licensed traders in Sude district, of which 75 were wholesalers, 116 were retailers and 29 were service rendering merchants. The major local cash crops in the district are Niger seed, Chat, Coffee, Cotton and spices. Hides and skins are the major exportable items in the district. A total of 2,222 skins of sheep and goats (number) were supplied to the

central market from the district. There are no known tourist attraction centers, but the beautiful scenery and the natural forest with its wildlife are the potential tourist attractions.

- Services:-Poorly developed transportation and communication networks existed in Sude district. The district had no all weather road, but had a dry weather road of only 18 kms. Telephone and postal services were non-existent, except a rural radio call. About 6.8% of the total population in the district had access to potable water supply. The sources of drinking water in the district in order of their importance are pond, river, spring and tap water. The district had no electricity supply and there were no fuel stations. Firewood is the most important source of energy in the district. The district had no banks and insurance organizations. There were 21 elementary and 2 junior secondary schools in the district with student population of 4,199 (18.2% females) and 161 teaching staffs (10.6% females). About 23.7% of the students were dropouts as the absence of a senior secondary school in the area discourages their further studies. There were 13 health assistants working in 6 clinics of the district. Similarly, there was one veterinary clinic (C type) that had one animal health assistant and one laboratory technician in the mentioned year.
- Development Activities:- A veterinary clinic is under construction. Survey and designing of the 19 kms road from Disksis town to Kula town, the constructions of two elementary schools and 4 houses and offices for development agents are the on-going development activities in the district.
- Problems and Potentialities:- Scarcity of farm and grazing lands, inadequacy of agricultural inputs and delay in supply, shortage of teachers and teaching materials, inadequacy of health personnel, and unemployment are some of the major problems in the district. On the other hand, the district has potentialities for cattle rearing, and crop production through irrigation.

Tena Profile

SOCIO-ECONOMIC PROFILE OF TENA DISTRICT

- Physical Characteristics:- Tena district is one of the twenty districts in Arsi zone with an area of 849.63 km2. The district is located in the central part of the zone. It shares boundary lines with Robe, Sude, Dodota Sire, Hetosa, Digalu Tijo and Shirka districts (fig.2). Ticho town is the administrative center of the district. The altitude ranges from 1,800 to 3,250m. Dega and Weina Dega account for 66.7%, and 33.3% of the total area of the district respectively. The major rivers are Demasho (66 kms), Harerghe (13 kms) and Walkesa (15 kms). The major soil types are vertisoils, luvisols and luvic phaeozems. The luvisol covers more than half of the area of the district and is highly fertile. Different types of vegetation covered about 2,960 hectares, of which 14.3% was covered by natural forest. Some of the wild animals are Ape, Monkey, Wild Pig, Hyena, Fox, Rabbit and Baboon. There are no parks, reserved areas and sanctuaries in the district for wildlife conservation.
- Population:- The total population of Tena district was 98,194 in 1997. The urban population was 9841 (10.0%) in the same year. The female population accounted for 53.8% of the urban and 49.7% of the rural in the mentioned year. The population density of the district was 1`15 persons per km2. The economically active population (15-64 years) was 47.3% of the total population in the district.
- Agriculture:- The 21 Farmers' Associations in Tena district had 12,220 member farmers, of which 1218 were females. There were also 7 Service Cooperatives in the district. About 34.4% of the total area of the district was cultivable, pasture land covered 7% of the total area. Forest, shrub and woodland covered 10.2%. Wheat, barley, teff and maize are the main cereals produced in the district. Fallowing, crop rotation and chemical fertilizers are used to maintain

soil fertility in the district. Fertilizers and improved seeds distributed to peasants in quintals were 7,800 and 626 respectively. Similarly, 181 liters of pesticides and 1,662 liters of herbicides were distributed to farmers. The average farm size per peasant was 2.4 hectares. However, There were about 1,200 peasants (10.5% of the farmers) without farmland in Tena district. Locust, army worm and cut worm are the dominant crop pests, while stem rust, leaf rust, and different bacterial diseases are crop diseases in the district. Thee were 105,846 cattle, 37,327 sheep, 11,841 goats, 6,702 horses, 1,558 mules, 9,054 donkeys and 67,467 poultry. Blackleg, anthrax pasterelosis and African horse sickness are some of the livestock diseases in Tena district.

- Mining and Industry:- Data could not be available regarding mineral resources of the district However, There were some small scale industries in the district. In the indicated year, there were 30 grain with 77 employees in Tena district.
- Trade and Tourism:- The total number of licensed traders in Tena district was 705, of which 26.9% were wholesalers, 53.1% were retailers and 20.4% were service Giving enterprises. The major local cash crops are onion, pepper, coffee and sugar cane. A total of 61,044 skins (number) of sheep and goats were sent to the central market from the district. Even though there are no data regarding attractive tourist sites, the natural vegetation with its wildlife in the area can attract tourists if protected from destruction.
- Services:- Regarding transport, a total of 58 kms of road was available in the district. The all weather road was 33 kms. Communication facilities were nonexistent. About 11.4% of the total population was supplied with potable water in the mentioned year. River is the main source of drinking water followed by ponds and springs in both rural and urban areas of the district. Firewood is the main domestic energy source followed by charcoal and dung in urban and dung stands first followed by firewood and crop residue in rural areas. There was no electricity supply in the district. Similarly, there were no

fuel stations, banks and insurance organizations in the district. There were 16 elementary, 4 junior and one senior secondary schools in Tena district with 8605 students and 264 teachers. Female teachers and students were 18.2% and 31.4% respectively. About 19.80% were dropouts in the indicated academic year. Regarding health services in the district. There were 4 clinics with 10 health assistants.

- Development Activities:- The on-going development activities include the constructions of one agricultural development office of the district, two development agent offices and residences, and one irrigation scheme. The survey and design of Diksis-Kula rural road and robe water construction projects are the other ones.
- Problems and potentialities:- Land scarcity for farming and grazing, high prices of inputs misuse of the natural environment and Jack of schools in Kolla areas are some of the problems. On the other hand, the district has good potentiality for irrigation in the on the lowland areas.

Tiyo Profile

SOCIO-ECONOMIC PROFILE OF TIYO DISTRICT

Physical Characteristics:- Tiyo district (576 km2) is found in the north western Part of Arsi zone bordering Digalu Tijo district in the south east, Hetosa in the north and north west, Ziway Dugda in the west and south west and Munesa district in the west (fig.2). Assela is the district and zonal capital. The district is characterized by plains, valleys, hills and mountains. Chilalo (3815m) is the highest peak in the district. Wurch, Dega, Weina Dega and Kolla covered 20.1%, 31.7%, 42.5% and 5.7% of the district respectively. The major rivers of the district are kater, Kulumsa, Gonde, Dosha and Walkesa. Chromic and Pellic Vertisols with texture ranging from black clay to loamy are the dominant soil types in the district. The black, red and loamy clay soils accounted for 80%, 15% and 5% of the area of the district respectively. Even though the district had areas covered with natural vegetation, data regarding the areal coverage could not be available. The wild animals in the district include Black Panther, Nyala, Duiker, Minilik's Bush Buck, Monkey and Semen Fox. There is no park or game reserve in the area for wild life conservation.

- Population:- In 1997, the total Population of Tiyo district was 128,297. The urban population was 57,986, which was 45.2% of the total population of the district. About 53.7% of the urban population and 49.8% of the rural population were females. The economically active population (15-14 years) constituted 55.4% of the total population in the district. The crude population density of the district was estimated at 223 persons per km2.
- Agriculture:- There were 15 Farmers' Associations with 13704 member farmers in Tiyo district. About 14% of the members were females. Similarly, there were 9 Service Cooperatives consisting 426 members, of which about 13.8% were females. The cultivable land accounted for 40% of the total area of the district. Grazing land was 23.1%. About 8.7% was forest, shrub and woodland in the mentioned year. Cereals accounted for 80.1% of the land covered by crops. Wheat, barley and teff are the most important crops. Manure, crop rotation, fallowing and chemical fertilizers are employed to maintain soil fertility in Tiyo district. Farmers in this district were the first to use agricultural inputs in Arsi due to the presence of CADU in the area some 20 years ago. About 15,353 quintals of fertilizers, 582.5 quintals of improved seeds and 210 liters of herbicides were used by farmers in tiyo district. About 5.9% of the farmers had no farm plots. The major crop pests are aphids,

army worm and stalk borer, while the major crop diseases are stalk. Leaf and head smut, leaf rot and root rots. The district had 98,966 cattle,33,817 sheep, 16,121 goats, 6,913 horses, 1,358 mules, 8,109 donkeys and 24,439 poultry. Some of the livestock diseases in the district are anthrax, blackleg, pasteuelosis and African horse sickness.

- Mining and Industry:- Construction minerals like Scoria, Pumice and Rhyolite are found in the district. Quarrying activities are being carried out in this area. Assela Malt Factory produces malt for all breweries in the country. There were 55 small scale industries in the district. About 70.9% of these small scale industries were grain mills. The small scale industries in Tiyo district employed 240 persons.
- Trade and Tourism:- There were 2023 licensed traders in Tiyo district, of which wholesalers, retailers and service giving traders were 21.7%, 53% and 25.3% respectively. About 2514 hides and 32,597 skins (number) were supplied to the central market from Tiyo district. Chilalo mountain with its wildlife is the most important tourist attraction in the district.
- Service:- Tiyo district had 46.5 kms of all weather and 16 kms of dry weather roads. Regarding communication, the district had a micro-wave telephone station and a post office. About 53.7% of the total population of the district and 18.2% of the rural population had access to potable water supply. Hence, over 80% of the rural population depends on rivers and unprotected springs as sources of drinking water. The main local energy source is firewood, both in rural and urban areas of the district. There were three fuel stations in the district. Tiyo district had 2 banks (commercial & development banks) and one insurance organization (Ethiopia Insurance Company). All the towns in the district were supplied with electricity. The district had 19 elementary, 8 junior and 2 senior secondary schools. About 27,217 students were enrolled, of which 47.9% were females. There were 981 teachers (26.6% females) in the district. About 14.6% of the students were dropouts. Tiyo district had

one hospital, a health center and 5 clinics with 36 medical doctors (2 at zonal health department), 67 nurses and 98 health assistant. Likewise, there was one animal health post with one animal health assistant and two vaccinators.

- Development Activities:- The on-going development projects in the district are the constructions of two development agents' houses and offices, and the works of Assela Water supply project nearing completion.
- Problems and Potentialities:- Scarcity of farmland, soil erosion, deforestation, insufficient supply of agricultural inputs and shortages of health institutions are some of the problems in the district. However, the district has potentially irrigable land of about 1,367 hectares, of which only 162 hectares have been irrigated so far.

Ziway Dugda Profile

SOCIO-ECONOMIC PROFILE OF ZIWAY DUGDA DISTRICT

Physical Characteristics:- Ziway Dugda district with an area of 1043.4 km2 shares boundary lines with East Shewa zone and Hetosa, Tiyo, Munesa and Dodola Sire district (fig.2). Ogolcho is the district capital. The district is characterized by undulating plains, rift valleys, hills and mountains. The altitude of the district ranges from 1,500 to 2,300m. The district is almost 100% Weina Dega (sub-tropical) in its agro-climatic condition. The only river in the district is Keter, which is 30 kms long within the district. The major soil types are Hamic, Mollic and Vitric Andosols with total coverage of 98.5% of the area of the district. Natural vegetation covered about 9.5% of the total area of the district. Some of the major wildlife in the district are Warthog, Hippopotamus, Hyena, Fox and Bush Buck. There are no parks, game reserves of sanctuaries in the district.

- Population:- The total population of Ziway Dugda district was 92,766 in 19997. The urban population of the district was only 2.9%. The crude population density was 89 persons per km2 in the mentioned year. The economically active population (15-64 years) accounted for 48.6% of the total population. Females were 50.3% of the total population in the indicated year.
- Ziway Dugda district had 31 Farmers, Association with 11,203 member Agriculture:farmers (9.9% were females). The district had 31.7% cultivable land, 6% grazing land and 46.3% forest, shrub and woodland. Others covered the remaining 16% of the district. The major crops grown are wheat, maize, teff and barley from cereals and horse bean, field pea and lentils from pulses. The average farmland size per household was 2.9 hectares. Manure, crop residue, crop rotation and chemical fertilizers are practiced to maintain soil fertility in the district. Fertilizer is the main agricultural input used in the district. About 2,656 quintals of fertilizers (2,289 qts of DAP and 367 qts of Urea), 178 guintals of improved seeds and 385 liters of herbicides were used by farmers. The dominant crop pests are stalk borer, aphids, cut worm, army worm and termites. Smut, rust, mildew and blight are major crop diseases. The district had 148,413 cattle, 11,663 sheep, 58,455 goats, 113 horses, 592 mules, 14,076 donkeys, 37 camels and 75,826 poultry. Anthrax, pasteurelosis, African horse sickness are the major livestock diseases in the district.
- Mining and Industry:- Rhyolite, pumice and sand are the basic construction materials available in the district. The only small scale industry in the district was grain mill. There were 14 grain mills that employed 35 persons.
- Trade and Tourism:- The total number of licensed traders in Ziway Dugda district was 330. Among these traders, 14.5% were wholesalers, 33.3% were retailers and 52.2% were service giving merchants. The major local cash crops are haricot bean sugar cane and papaya. The district had supplied 2,922 skins (number) to the central market. The islets located in Ziway lake are sites for tourist

attractions in the district. Habura and Sango caves are also interesting tourist attraction areas.

- Service:-About 37 kms of all weather and 220 kms of dry weather roads were available in the district. The district had one manual telephone station and one postal agent in the mentioned year. About 25.5% of the population of the district had potable water supply. Well is the major source of drinking water in the rural areas of the district followed by pond. There was no electricity supply in the district. Firewood is the main source of energy in both rural and urban areas. The other source of energy is dung followed by crop residue. Ziway Dugda had no fuel station, banks and insurance organizations. There were 20 elementary, three junior secondary and one senior secondary schools in the district. The total number of students in the district was 11,219 (20.4% females). There were 207 teachers (7.2% females) teaching at the schools in the district. About 25.3% of the students left schools before the end of the academic year. Regarding health service in the district, 8 clinics and 13 health assistants were available in the district. As of veterinary service, the district had no animal health clinic or health post in the mentioned year.
- Development Activities:- Four residence houses and offices and one veterinary clinic are under construction in the district. The other project in the district is the drinking water project financed by Oromo Self Help Organization (OSHO).
- Problems and Potentialities:- Some of the problems are scarcity of farmland and grazing land soil erosion, deforestation, drought and shortage of teachers and health personnel. On the other hand, some areas in the district have the potentialities for irrigated agriculture.