

CHAPTER 1 INTRODUCTION

1.1 Introduction

The Study on “Socio-Economy and Institutions” comprises (i) current conditions of socio-economy and institutions concerning the Project, (ii) identification of constraints and (iii) proposed institutional set-up for implementation of the Master Plan.

To promote successful irrigation and rural development in the Meki area, the institutional strengthening of OIDA and other concerned organizations is essential. In addition, reinforcement of the staff capability is also required.

The Study was firstly made through an overall assessment of OIDA, the district administration, the peasant associations and community based farmers’ organizations to prepare the institutional building program within the framework of the Master Plan. The organizational plans consist of three (3) aspects, namely organizational development, capacity building and financial management.

1.2 Study Area

The study area administratively falls in Dugda Bora Wareda (district) in East Shewa Zone of Oromia Region. It is located in the center of Oromia Region, that is the largest region in Ethiopia with a total coverage of 353,007 km² or 32% of the national territory and provides livelihood to 22.35 million or 35% of the total national population. The main urban center of the area is Meki town located at 130 km south of Addis Ababa. The S/W selected the proposed irrigation development area situated on the bottomland of the Rift Valley (El. 1,650 m) with a total area of 400 km² extending to the north of the Meki town within Dugda Bora Wareda.

1.3 Study Approach

The socio-economic and institutional study was made on the basis of the following information :

- (1) Official statistics published by the Central Statistical Authority,
- (2) Internal statistics collected from the relevant federal and regional state government organizations,
- (3) Results of questionnaire survey to OIDA and concerned organizations,
- (4) Results of interview survey to the staff of OIDA head office, the central branch office, and the district administration office, chair persons of peasant associations, and farmers, and
- (5) Results of the rapid rural appraisal (RRA) study carried out under the Study.

The OIDA organizational plan was formulated by the following procedures (Ref. Figure I.1.1):

- (1) Questionnaire survey on staffing, activities and constraints and survey on budgets, and preliminary assessment of the survey results,
- (2) Questionnaire survey to heads of OIDA departments and service organizations of the head office and central branch office, and assessment of survey results,
- (3) Interview survey to and discussion with General Manager, department heads and team heads of the head office, and central branch head regarding organizational streamlining, allocation of staff and budget, management and information system, and action plans for organizational strengthening, and
- (4) Reflecting the survey results to the OIDA strengthening plan and JICA verification study.

CHAPTER 2 PRESENT SOCIO-ECONOMY

2.1 Demography

2.1.1 Population and Household

The study area administratively falls in Dugda Bora Wareda (district) in East Shoa (Shewa) Zone of the Oromia Regional State. The Dugda Bora district composes 54 Peasant Associations (PA), i.e. a lowest administrative unit.

The demographic conditions of the District are characterized by its higher population density, i.e. 111 persons/km², in comparison with the Ethiopian average of 58 persons/km² and Oromia Region of 63 persons/km². The detailed demographic data is presented in Table I.2.1 and summarized below.

Area	Year 2000 (Estimated)			
	Population ('000)	Family Size	Land Area (km ²)	Population Density (P./km ²)
Ethiopia	63,495	4.83	1,097,000	58
Oromia Region	22,354	4.84	353,007	63
East Shewa Zone	1,990	4.82	13,624	146
Dugda Bora District	163	4.69	1,468	111
54 PAs	125	4.74	1,452	86
Meki Town	28	4.51	14	1,993
Alem Tena Town	10	4.52	2	4,843

The population and household of the District in 1994 including Meki and Alem Tena towns were 134,454 and 28,688, respectively. Applied the annual population growth rates of 2.73% for rural area and 5.05% for urban area in Oromia region, the population and household of the District in 2000 are estimated to be 162,750 and 34,790, respectively. The average family size and population density in 1994 were 4.7 persons/household and 92 persons/km² that is assumed to be increased at 111 persons/km² in 2000 (Ref. Table I.2.2).

Spatial distribution of the district population is shown in Figure I.2.1 for 1994 and Figure I.2.2 for 2000. Population density in 54 PAs was 73 persons/km² on average in 1994 and assumed to be 86 persons/km² in 2000. The most densely populated areas are both Meki and Alem Tena towns. Population densities of six PAs surrounding Meki towns, i.e. Gebra Korki Adi (No.30 in Figure 3.2.1), Bekele Gerisa (No.31), Weldiyo Mekdela (No.32), Woldia Kelina (No.33), Shubi Gamo (No.34), Darara Dallecha (No.39), were higher at 106 to 169 persons/km² in 1994. Comparatively dense populated areas are Dodo Wedera (No.51) and Malima Terae Beri (No.52) located at the west bank of the Koka lake, Aella Gebre Dalacha (No.14), Jero Raka (No.16) and Korkie Adama (No.17) located at western mountainous and upland area, and Abuno Kumoro (No.2) and Adele Mirt (No.3) located at the west bordering areas surrounded by the area of Southern Region.

2.1.2 Ethnic Groups and Religion

Predominant ethnic group in Dugda Bora District is Oromo that occupies around 73% of the total population in 1994 followed by Guragie (14%) and Amara (8%). The share of Oromo population in the District is slightly higher than in East Shewa Zone (70%) and lower than in Oromia Region (85%). Around 95% of the population in the District believe Orthodox and followed by Muslim (2%), Traditional (1.3%), Catholic (0.8%), and Protestant (0.6%). The demography by ethnic groups and religion in 1994 is summarized as follows (Ref. Table I.2.3) :

Item	Year 1994			
	Dugda Bora District	East Shewa Zone	Oromia Region	Ethiopia
Sampled Population ('000)	134.5	1,668	18,474	53,132
I. Ethnic Groups (%)				
Oromo	72.8	69.6	85.0	32.1
Amara	8.3	16.8	9.1	30.1
Guragie	14.1	3.7	0.9	4.3
Tigraway	0.8	1.3	0.4	6.2
Others	4.0	8.6	4.6	27.3
II. Religion (%)				
Orthodox	94.9	58.8	41.3	50.6
Muslim	2.3	35.0	44.3	32.8
Catholic	0.8	0.9	0.6	0.9
Protestant	0.6	3.5	8.6	10.2
Others	1.4	1.8	5.2	5.5

2.1.3 Literacy Rate

The literacy rate in the District in 1994 was 22% on average, 29% for male and 15% for female. In the rural area of 54 PAs, those rates were lower at 13% on average, 19% for male and 5% for female. Those district figures are similar as the average in Oromia Region and Ethiopia, while lower than East Shewa Zone (36% in total and 20% in the rural area). The literate female population is significantly limited in the rural area of the District. The literacy rates aged ten years and over are summarized as follows (Ref. Table I.2.4) :

Item	Literacy Rate (%), Age Ten Years and Over, Year 1994			
	Dugda Bora District	East Shewa Zone	Oromia Region	Ethiopia
Total	22	36	22	23
Male	29	42	29	30
Female	15	30	16	17
Rural Total	13	20	16	15
Male	19	27	23	22
Female	5	13	9	9

2.2 Administration

Oromia Regional State comprises 12 zones, which are further subdivided into 180 districts. Dugda Bora is one of 12 woredas (districts) of East Shewa Zone. Zonal capital is located at Adama and Dugda Bora district is located in a central part of East Shewa Zone.

Dugda Bora District is organized by 54 PAs that were reorganized from former 117 PAs. The District is administered by one administrator and 15 councilors elected by once in five years. PA chairpersons are appointed officially by the administrator upon the prior consent of villagers. PA chairpersons play as a coordinating agent at respective PA. They serve their PAs on volunteer basis without compensation.

Meki and Alem Tena towns are located within Dugda Bora District and have own administrative units separately from the district administration.

2.3 Establishment and Economic Activities

The share of economically active population in East Shewa Zone was 68% of the population aged ten years and over in 1994 that was lower than ones in Oromia Region (75%) and Ethiopia (72%). Unemployed population ratio in East Shewa Zone was 6% that was higher than Oromia Region (2%) and Ethiopia (3%). There are no official statistics for Dugda Bora District, while the 1994 Census indicates the unemployment population ratio in Meki town at 12%. This means the District employment opportunities are limited comparing to the other districts in the East Shewa Zone (Ref. Table I.2.5).

Regarding employment opportunities by industry, only regional level information is available. In Oromia Region, 93% of employment was created by agriculture, forestry and fishery sector in 1994 followed by service sector such as wholesale and retail trade (2%), hotel and restaurant (2%), government employees (1%), etc. Manufacturing employment was limited to 1% of the total employment. There are no large-scale manufactures in the Dugda Bora and agricultural production including livestock and fishing in the Ziway lake is major industry in the District at present. Employment condition in the District is considered similar as the Oromia Regional status (Ref. Table I.2.6).

The number of industrial establishments registered in the Dugda Bora District was 421 in total comprising grain processing (52), bakery (7), repair shop (12), traders (25), retailers (215), hotel (11), restaurant (36), hospital and clinic (13), fuel station (3), government offices (12), schools (31), telecommunication and electric supply (4). The 421 establishments assumed to generate around 1,300 employment in the district. The majority of grain processing factories were located at Meki (34 mills) and Alem Tena (9 mills) towns except 9 flourmills located at six PAs. Beside the registered mills, there are some mills operated in the PAs without registration of the District

office.

Location of Flour Mill	Number
Koto Bili (No.5 in the Map)	1
Kiltu Ambolae (No.19)	3
Shubi Gomu (No. 34)	1
Tuchi Shumayan (No.35)	2
Derara Dallecha (No. 39)	1
Berta Sami (No.42)	1
Meki	34
Alem Tena	9
Total	52

2.4 Farm Economy and Poverty Line

Results on household income, consumption and expenditure survey in 1995/96 cover the information by the regional states including Addis Ababa. The respective medium class annual income and expenditure for rural households were Birr 4,700 and 5,300, respectively that were a little higher than the Ethiopian Birr 4,000 and 4,400. These reversed figures, i.e. expenditures are larger than incomes, don't mean negative household economy because the medium classes of income and expenditure are separately estimated. These figures shall be refereed for the assessment of farmers' economy in the District by using the data collecting through RRA survey (Ref. Tables I.2.7 and I.2. 8).

The major items of average income for the rural households are agriculture (72% of the total income) followed by income from gifts (14%) and non-agricultural income (6%) in Oromia Region. On the other hand, major expenditure items are food (53% of the total expenditure) followed by the rent, fuels, power and water (15%) and clothing and footwear (10%). Those composition of income and expenditure in Oromia Region is similar with Ethiopian average as follows (Ref. Tables I.2.9 and I.2.10) :

Items	Oromia Region (%)	Ethiopia (%)
I. Income	Birr 6,230	Birr 5,420
Household agricultural income	72	70
Income for gifts/obtained	14	15
Non-agricultural income	6	6
Others	8	9
II. Expenditure	Birr 6,540	Birr 5,570
Food	53	54
Rent, fuel, power, water, construction	15	16
Clothing, footwear	10	10
Others	22	20

The farmers in the District sell their crops such as grains and vegetables, firewood, and livestock animals such as goats, cattle, donkey and poultry in Meki and Alem

Tena towns during the market days. Those sales are main cash income for the farmers. The vegetables are mainly produced around the Koka and Ziway lakes, and Meki river for sales. The milking from cattle and goats are commonly made mainly for home consumption and sales of dairy products are limited.

CHAPTER 3 PRESENT INSTITUTIONS FOR RURAL DEVELOPMENT

3.1 Government of the Regional State of Oromia

Oromia Regional State government comprises five (5) sector bodies, i.e. social, economic, administration and legal, military and women's affairs. The economic sector comprises eight (8) bureaus and two (2) authorities including OIDA. The social sector covers seven (7) bureaus (Ref. Figure I.3.1).

The parliament and federal state council organizes the national administration, while the respective councils are formed at regional, zonal and district levels. Prime minister manages the administrative ministries at national level upon the decisions made by the parliament and federal state council. At the regional level, both the president and executive committee supervise the administrative bureaus that manage the zonal and district offices.

Councilors at the national, regional and district levels, and the zonal and district administrators are elected respectively by the people. The regional administrative bureaus directly manage the zonal and district offices that are coordinating with the zonal and district administrative offices for planning and implementation of the projects (Ref. Figure I.3.2).

3.2 Oromia Irrigation Development Authority (OIDA)

3.2.1 Organization and Staffing

Oromia Irrigation Development Authority (OIDA) was established in July 1999 through re-structuring of Oromia Water, Mines and Energy Resources Development Bureau (OWMERDB) that was divided into three institutions, i.e. new OWMERDB, OIDA and Oromia Water Works Construction Enterprise (OWWCE). The establishment of OIDA aims at streamlining the overall irrigation development service activities under one organization. The OIDA's mission is development of small and medium scale irrigation and drainage schemes in order to enhance the agricultural production and food security of the region. According to "Oromia Regional State Irrigation Development Authority Establishment Proclamation, No. 30/1999," OIDA has the following major mandate :

- i. Undertake the study, design and construction works of irrigation schemes in suitable areas of the region in order to secure food self-sufficiency,
- ii. Contribute towards hastening the socio-economic development of agrarian community, and
- iii. Enable the community to participate in the study, construction and administration of irrigation projects and benefit from them.

The present organizational se-up of OIDA comprises the head office located at Addis Ababa and headed by the General Manager, four branch offices (Central, Eastern,

Western and Southern branch offices), and 69 district offices as shown in Figures I.3.3 and I.3.4, respectively. The OIDA has a board and a chairperson to be appointed by the Executive Committee of the Oromia Regional State. The board has 5 to 7 members. The board includes the following responsibilities :

1. Nomination of the General Manager of OIDA and present to executive Committee for an appointment,
2. Formulate and submit policies and laws of OIDA to the executive committee,
3. Submit to the executive committee the annual plan and budget of OIDA,
4. Issue directives regarding contract employees based on the recommendations made by the general manager,
5. Make a study to strengthen OIDA in manpower, property and management systems, and present it to the executive committee for decision,
6. Issue internal regulations of the Board and implement the same,
7. Discuss and provide solutions regarding displaced persons resulting for the construction of irrigation schemes and provide solutions for the problems related to water and land use,
8. Control the proper utilization of human, material and financial resources of OIDA,
9. Issue directive for the organization, powers, and duties of the committees to be established at different levels,
10. Issue directive or guide lines which are deemed necessary, and
11. Perform such other duties, which assist OIDA to attain its objectives.

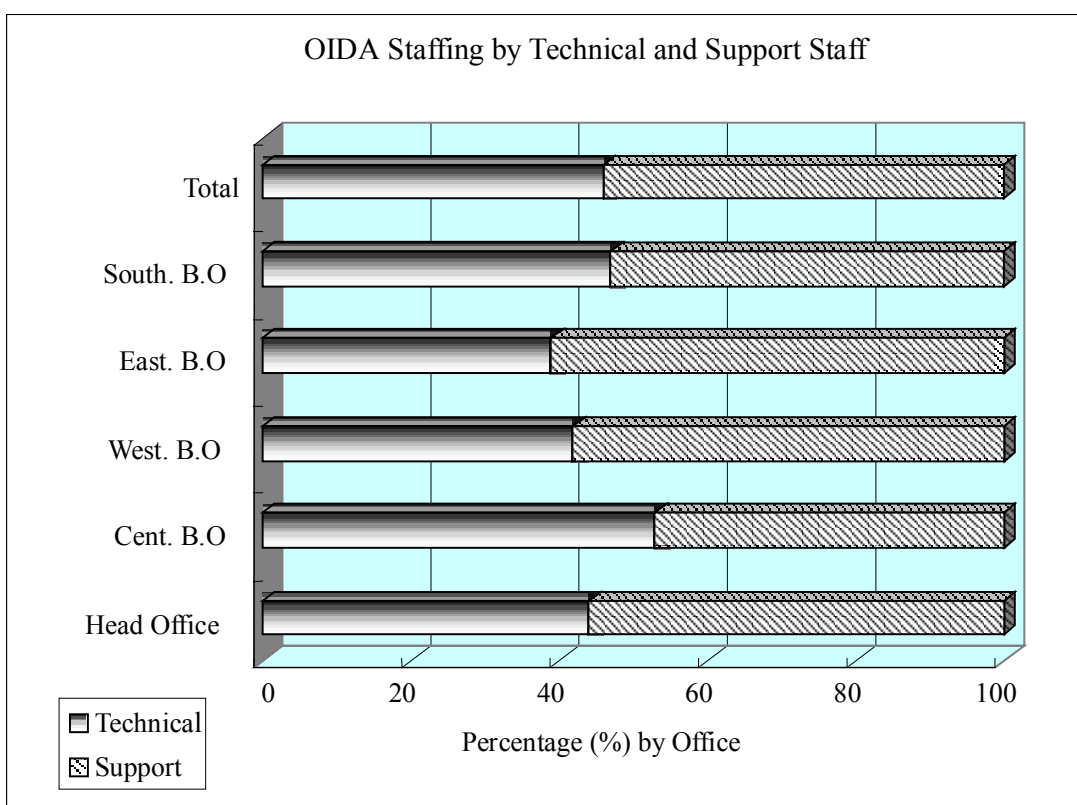
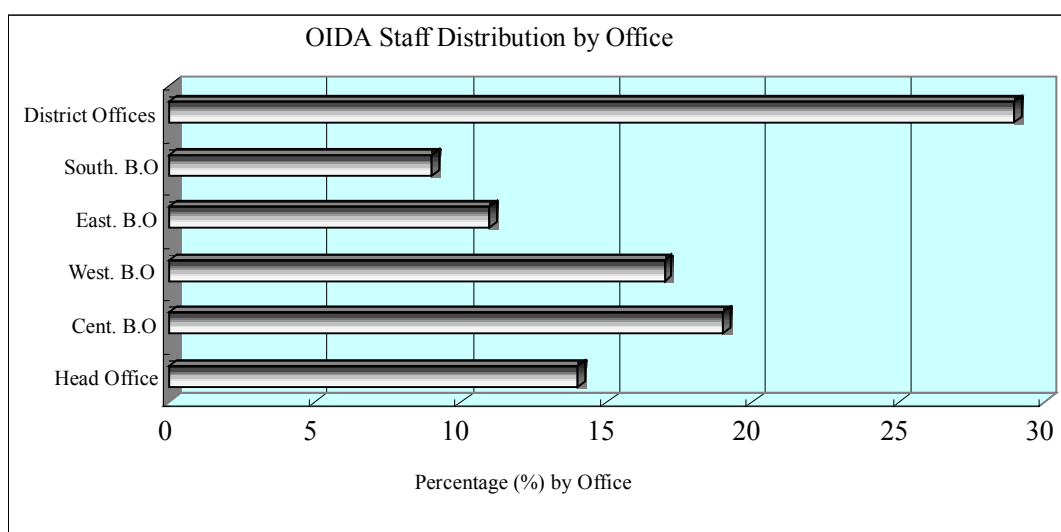
At present, the OIDA board members comprise Oromia Regional State Council (Chairperson), Ministry of Economic Development and Cooperation (Federal Government), Ministry of Water Resources (Federal), OWMERDB, Oromia Agriculture Bureau, Oromia Cooperative Promotion Bureau, and OIDA.

The OIDA head office is organized by four (4) departments, namely Study and Design, Construction, Extension and Watershed Management, and Community Participation and four (4) service units, namely Planning and Programming, Research and Laboratory, Administration and Finance, and Audit. Similarly to the head office, the respective branch office is also organized by four (4) teams, i.e. Study and Design, Construction, Extension and Water Management, and Community Mobilization and three (3) service units, i.e. Planning and Programming, Administration and Finance, Garage and Transport. Under the branch offices, the district offices are established at 69 districts out of 180 districts in the region.

As of end of November 2000, the OIDA staff amounted to 720 persons consisting of 102 persons at the head office, 407 persons at four (4) branch offices, 211 persons at 69 district offices. The OIDA staff members are classified into technical and support staff according to job categories. The technical staff accounts for around 60% in total. Excluding the staff of district office, the technical staff is limited at around 44% at the head office and 46% at the branch offices. The staff with and above college diploma comprises around 52% of the total staff as follows (Ref. Tables I.3.1 to

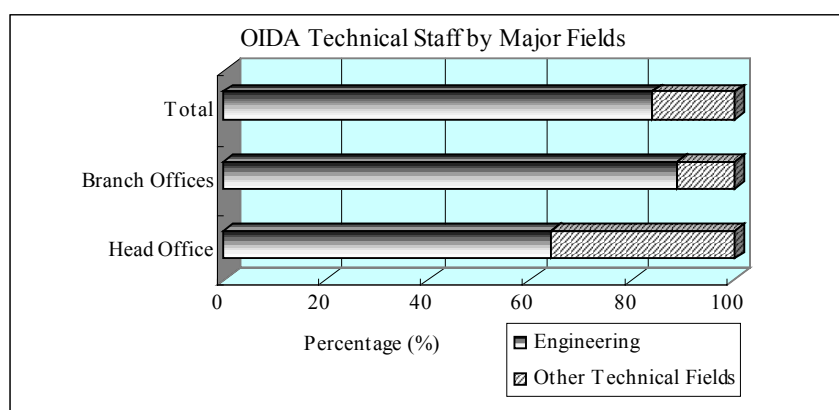
I.3.4) :

Offices	No. of Staff, as of Nov. 2000				
	Total		Technical	Support	Staff with College Diploma
	No.	%			
Head Office	102	14.2	45	57	56
Branch Offices	407	56.5	187	220	143
Central	136	18.9	72	64	42
Eastern	82	11.4	32	50	29
Western	121	16.8	51	70	44
Southern	68	9.4	32	36	28
District Offices	211	29.3	198	13	175
Total	720	100.0	430	290	374

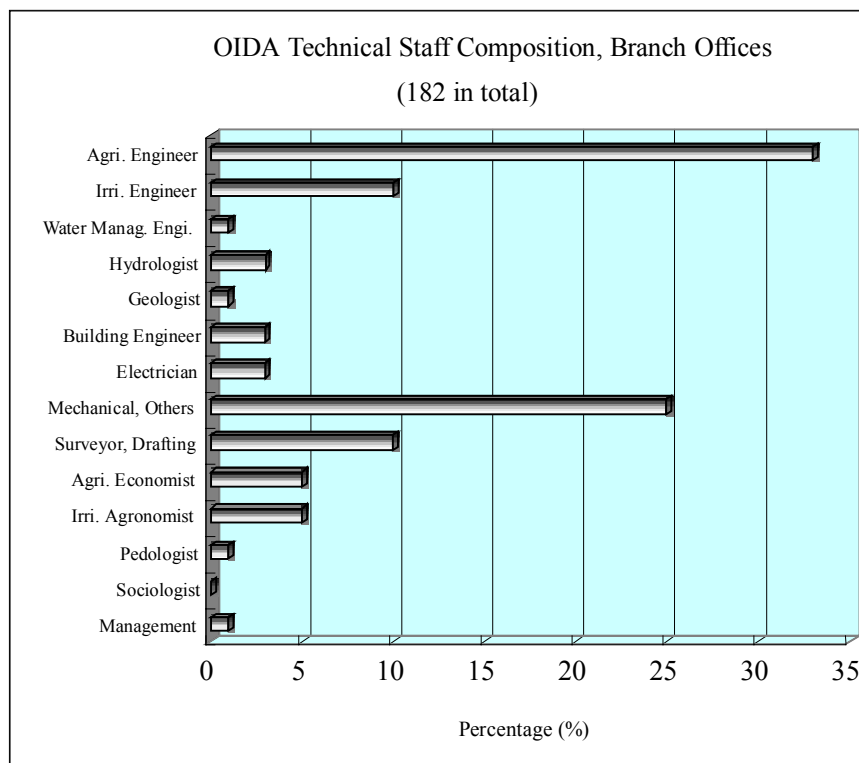
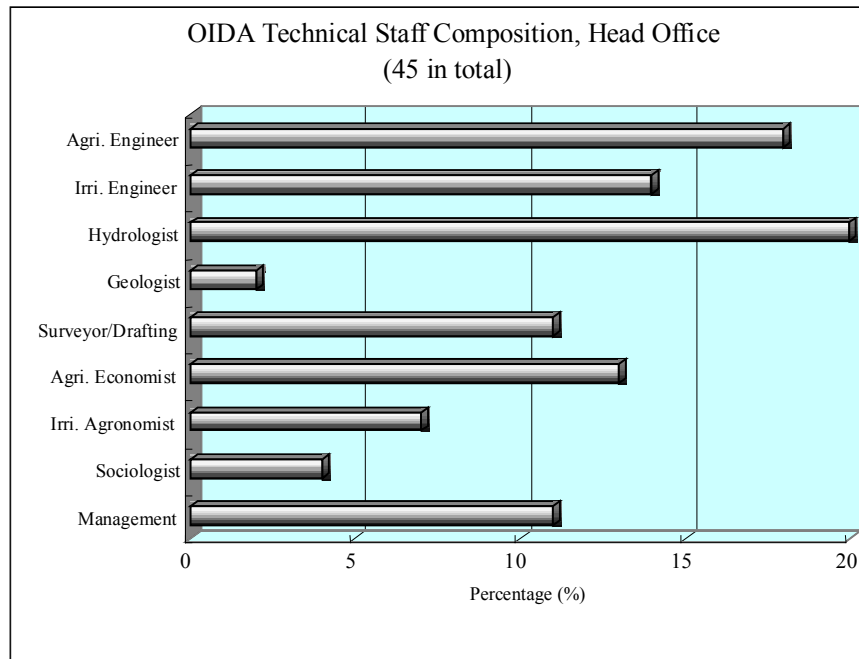


The district offices were not organized at the time of Irrigation Department under the old WMERDB. The number of technical staff excluding the OIDA district offices became 232 that were increased from 188 staff at the time of Irrigation Department. Of 232 technical staff at present, BS and MS holders are 78 and 19, respectively. Engineering staff such as agricultural and irrigation engineers, hydrologists, geologist, etc. accounts for 195 staff or 84% of the total technical staff. Technical staff composition by fields are summarized as follows (Ref. Table I.3.5) :

Technical Fields	No. of Staff, as of Nov. 2000					
	Total		Head Office	Branch Offices	Staff with	
	No.	%			BS	MS
I. Engineering	195	84.1	29	166	54	14
Agricultural Engineer	70	30.2	8	62	34	5
Irrigation Engineer	24	10.3	6	18	9	4
Hydrologist/Hydraulic Eng.	14	6.0	9	5	5	5
Geologist	3	1.3	1	2	3	0
Water Management Eng.	1	0.4	0	1	0	0
Building Engineer	5	2.2	0	5	0	0
Electrician	5	2.2	0	5	0	0
Mechanical, others	73	31.5	5	68	0	0
II. Other Specialist	37	15.9	16	21	27	5
Management	7	3.0	5	2	5	0
Agricultural Economist	15	6.5	6	9	13	2
Irrigation Agronomist	12	5.2	3	9	6	3
Sociologist	2	0.8	2	0	2	0
Pedologist	1	0.4	0	1	1	0
	232	100.0	45	187	78	19



The engineering staff of OIDA accounts for 64% at the head office and 89% of the respective technical staff. Of the 195 engineering staff in total, agricultural engineers are predominant at 70 in number or 36% followed by irrigation engineers (24 in number or 12%). The 15 agricultural economists and 12 irrigation agronomists account for 73% of other specialists. The two sociologists are deployed at the head office for promoting farmers' participatory irrigation development.

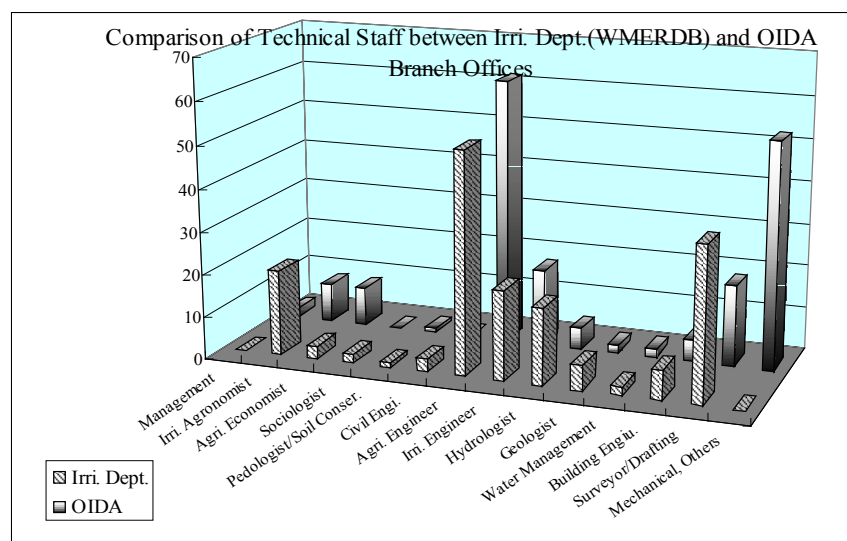
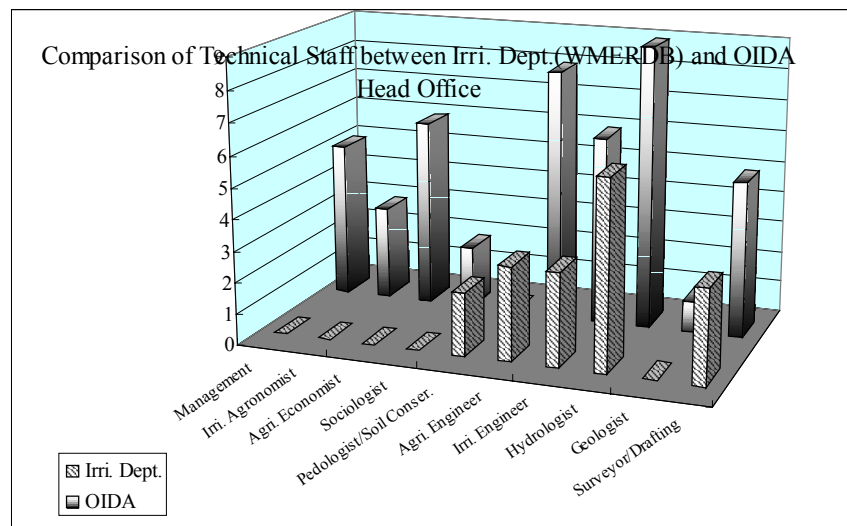


Comparing between the former Irrigation Department (ID) of WMERDB and the present OIDA, number of technical staff and their composition are changed drastically as follows :

1. Number of technical staff at the OIDA head office is increased from the ID's 17 to 45.
2. Number of technical staff at the OIDA branch offices is slightly increased from the ID's 171 to 187. Including the 198 technical staff at the OIDA's

district offices, number of technical staff of OIDA at the field level is drastically increased at 385.

3. Engineering staff at OIDA head office is increased in number, i.e. agricultural engineer (three to eight) and irrigation engineer (three to six). Non-engineering technical staff such as agricultural economist, irrigation agronomist, sociologist, etc. is newly deployed for organizing the OIDA head office.
4. At the branch offices, agricultural engineers are increased from the ID's 52 to the OIDA's 62, while assignment of irrigation engineer is decreased from 21 to 18. The number of agricultural economists is increased from three to nine, while irrigation agronomist decreased from 20 to nine. Through organizing the OIDA organization, technical staff assigned at the branch offices was transferred to the district offices. The major technical fields of the OIDA district staff are irrigation agronomist, and social workers, agricultural engineers.



3.2.2 Re-Organization Process and Functions of OIDA Units

Since the establishment of OIDA in July 1999, the internal organizational set-up and staff assignments have been implemented. The OIDA has nine (9) on-going projects, three (3) rehabilitation projects and 15 new projects under the feasibility study. In addition, 69 district offices assist the existing irrigation schemes and for application of new irrigation projects from the farmers.

Rural Water Supply Project, Oromia assisted by GTZ German Technical Cooperation supported the re-organization of the OWMERDB as well as OIDA internal organization set-up including verification of roles and functions of respective OIDA units in 1999. Upon the recommendation of the GTZ consultant, OIDA formed the present organizational composition. The major differences are summarized below:

- i. Eliminate position of the Deputy General Manager,
- ii. Abolish Equipment and Supply Service,
- iii. Add a Research and Laboratory Service,
- iv. Eliminate Research Team from Study and Design Team,
- v. Reduce number of team in all departments into two,
- vi. Move Contract Administration Team under Construction Department,
- vii. Abandon Construction Team,
- viii. Merge Watershed Management Team with Extension Team under Extension and Watershed Management Department, and
- ix. Eliminate Regulation and Monitoring Team.

After one and a half years since the OIDA establishment, the present activities of respective units are verified by using the questionnaires to the heads of departments and units. For the reference, the central branch office as a representative of four branch offices was surveyed. The roles and functions answered by the heads are summarized in Table I.3.6.

The survey identified some duplicated and unclear roles among the head office units, and between the head office and the branch offices. The survey focused on duplicated responsibility for appraisal of the feasibility study and supervision of OIDA's construction works (force account work). It also observed unclear functional demarcation of all of service activities between the head and branch offices. The last identifications arose from insufficient reporting system between the branch offices and head office departments.

3.2.3 Budget Allocation and Future Staff Deployment

Annual capital budget (project investment cost) for the irrigation development during 1997 to 1999 in Oromia Region was around Birr 7.3 million on average that accounts for 2% of the total economic sector investment of Birr 228.0 million. Both budget amount and share of irrigation development were decreased from Birr 22.5 million

(6%) on average during 1993 to 1995 (Ref. Table I.3.7).

Annual budget allocation for salary and recurrent cost during 1996 to 2000 was Birr 805 million on average. Of the total allocation, OIDA shared Birr 5.9 million or 0.7% in 2000 (Ref. Table I.3.8 to I.3.10).

Share of annual salary and recurrent budget to the total budget including the capital budget in the region was 32% for the economic sector, 78% for the social sector, and 62% in the both sectors. The salary and recurrent cost of OIDA, accounts for 42 % of the total budget that was higher than the average of the economic sector as follows:

Sector/Organization	Birr '000			
	Capital Budget (Ave. 1997-99)	Salary/Recurrent (Ave. 1997-99)	Total	% of Salary/Recur to Total
I. Economic Sector Total	228,034	108,239	336,273	32.3
Agriculture	59,185	11,934	71,119	16.8
Irrigation	7,252	5,305	12,557	42.2
Water, Mining and Energy	72,859	11,449	84,308	13.6
Industry and Tourism	196	9,334	9,530	97.9
Rural Road	85,860	16,064	101,924	15.8
Transport	2,682	12,044	14,726	81.8
II. Social Sector Total	149,040	515,414	664,454	77.6
I & II	377,074	623,653	1,000,727	62.3
Regional State Total	384,198	869,466	1,253,664	69.4

OIDA previously proposed to increase staff structure from the current 720 staff to around 1,500 staff. Taking the overhead cost for salary and recurrent cost into consideration, increase in staff number need to be implemented rationally according to the requirement for irrigation development, capacity building of present and newly deployed staff, further improvement of systematic service provision, etc.

3.3 District Administration of Dugra Bora

3.3.1 Organization and Staffing

Dugda Bora district is organized by 54 PAs that were reorganized from the former 109 PAs. The District is administered by one administrator and 15 councilors elected by once in 5 years.

The Dugda Bora district office comprises six (6) units, i.e. economy, social, peace and security, policy and administration, women's affairs, and administration and finance. The employees account for 14 as of November 2000. The councilors are mainly working on coordination on economic, social and peace issues, and women's affairs. The district administration office hold a monthly meeting with PA chair parsons regarding peace and security, development, government revenue, and credit services.

The Oromia Regional State Government has the following nine district offices with 226 officials:

- i. Agricultural Development Office, Agriculture Bureau
- ii. Irrigation Development Office, OIDA (Central Branch Office)
- iv. Cooperative Office, Cooperative Promotion Bureau
- v. Health Office, Health Bureau
- vi. Education Office, Education Bureau
- vii. Finance Office, Finance Bureau
- viii. Police Office
- ix. District Court
- x. District Attorney Office

3.3.2 Activities of District Administration Office

The district administration office coordinates regularly once a week with the regional offices regarding education quality and drop out issues with the Education Office, credit services and farmers' debt with the Agricultural Development Office, the government revenue with the Finance Office, and peace and security with the Police Office. Occasional meeting is held on security problem with the Police Office, disease out break with the Health Office, drought and hunger with the Agricultural Development Office, etc.

The District administration office has no initiated projects at present. Activities of the district administration office are shown in Table I.3.11.

3.3.3 Tax Collection and Budget for District Administration Office

The tax collection at PA level is made directly by the Finance Office under the coordination with the District Administration Office and PA chairpersons. The taxes comprise the direct tax (land use, business, and workers' income) and indirect tax (service and sales). Meki town municipality collects weekly market toll fees mainly from traders and uses as own municipal revenue.

The district administration budget is allocated fully by the State Government. The annual budget execution during 1998 to 2000 was Birr 210.6 thousand on average that composed of 61% for salary of the administrator, councilors and office employees, and 39% for recurrent budget expenditures. Of the recurrent expenditure, the District spent 61% for training cost, 28% for per diem, and the rest for operation cost of the office (Ref. Table I.3.12).

3.4 Peasant Associations and Local Organizations

3.4.1 Peasant Associations

The present 54 Peasant Associations (PAs) in the Dugda Bora district were integrated from 109 old PAs. Organization of PAs had been implemented parallel with the nationalization of farmland under the ex-military administration started in 1976. Territory of PA was determined taking their geographic features and magnitude of population. Under the ex-military regime, PA executive committee was headed by the PA chairperson and five (5) committees for audit, dispute, development, propaganda and education, and social affairs were organized. The members of the executive committee including the PA chairperson were appointed by the general assembly and approved by the District Agricultural Office.

At present, PA chairpersons are appointed officially by the administrator upon the prior consent of villagers and working as a coordinating agent at respective PA without compensation. PA chairpersons have duties on community mobilization, security works, strengthening democracy, and reporting at respective PA. Based on the RRA survey, PA committees and their activities at most of PAs in Dugda Bora district are not functioned. Ordinary farmers interviewed have no sense belonging to the respective PAs.

3.4.2 Community Organizations

Beside the PA administration, there are indigenous community organizations such as Debbo, Jigge, Wonfel, Edir, Mehaber, Equb, etc. Debbo, Jigge and Wonfel are active during peak agricultural season for plowing, sowing and harvesting. Their farmer members range between two to twenty. Debbo is most prevailing in the area. The labor exchange in Debbo is practiced for farming and construction of houses by the mutual trust and consensus among their members. Beneficiary farmers usually prepare food and drink for participant farmers.

Edir in the local community is welfare organization to defray cost of funeral and to assist families in the event of death. Members of Edir contribute a common fund and attend the funerals of other members. To avoid ostracizing from the community, every household belongs to at least one Edir.

CHAPTER 4 DEVELOPMENT CONSTRAINTS

4.1 Economic Constraints

4.1.1 Current Situation

Major industrial activities in the study area are crop cultivation, livestock raising, and utilization of local resources such as grasses, wood, stone, and sand. Most of local population depends on the agricultural production and the products are mainly utilized in the area. Manufacturing is limited at the agricultural processing, i.e. grain processing, bakery, furniture making, etc. Service sector creates a second largest employment followed by the agriculture sector. Of 421 establishments registered in the Dugda Bora district, trading sector such as retailers and traders accounts for 241 followed by the restaurants (36) and hotels (11).

Beside the stabilization and increase of agricultural production in the area, creation of employment opportunities is a most indispensable development measure in the area. In parallel with population increase, present scarce employment other than farming will create social instability in the area. The migration to the local cities and Addis Ababa from the countryside will cause other social problems including informal settlement with insecurity and environmental deterioration.

The economic development in the area needs to focus more on generation of employment in the area by establishing manufacturing industry as well as enhancement of agricultural production. Promotion of village level cottage industries and introduction of medium-scale manufacturers will create additional employment opportunities in the area.

There are limited advantages in the area for industrial investment due to insufficient infrastructure, i.e. poor quality of domestic water, unstable electric supply, limited telecommunication means, and scarce skilled laborers comparing with the Ziway town near from Meki town (less than 30 minutes drive), the regional capital cities as well as Addis Ababa. In addition to the poor infrastructure, local materials for processing including agricultural products are scarce in the area.

Cooperative activities in the area are also stagnant and only two (2) primary cooperatives are active in the area. Farm input distribution and vegetable marketing are main activities of both cooperatives. Processing of grains and other agricultural products is not yet initiated as cooperative business.

4.1.2 Limited Support for Rural Industrialization

Oromia Agricultural Development Bureau (OADB) has not covered extension activities on promotion of village industries in the area. Techniques, Industry and Tourism Bureau has no offices at the district level. Only some NGOs are promoting cottage industries including handcraft at farmer's level through provision of training

and materials for processing. There are no government programs in the area for rural industrialization including cottage industry promotion.

Oromia Cooperative Promotion Bureau (OCPB) assigns two (2) technical and two (2) support staff in the Dugda Bora district. Support services for newly organized cooperatives as well as rehabilitation of formerly organized cooperatives are hardly implemented by the limited staff and budget.

4.2 Social Constraints

PA administration is not well functioned in the area. Farmers seem to have more sense of belonging to their own communities than the unit of PA. Identity in the local community becomes more obvious after merger of two to three old PAs to one new PA. Communication and visitation among the local communities under the new PA is hardly made due to enlarged PA territory and physical disturbance on the extending gullies. According to the interview survey, creation of consensus among the communities became more difficult in the new PAs.

Gender imbalance is commonly observed in the area. Women’s participation in the communal activities and educational coverage are limited. Housewives are responsible for domestic works such as cooking, fetching water and collection of firewood including animal rearing. There are rare cases for the wives to share farming activities with husbands. Works for men and women are clearly demarcated in the farm households of the area.

4.3 Organizational Constraints

4.3.1 Oromia Irrigation Development Authority (OIDA)

OIDA has been established in July 1999 separately from OWMERDB and currently deploys 720 staff in total. The irrigation development activities implemented by OIDA are more focusing on participation of beneficiaries from the planning of irrigation schemes to their O&M stages. To strengthen field level services on irrigation farming, more district offices are being established and more extension staff are mobilized on site. The present staff number of 69 district offices is 211 in total that are increased up to 621. Through the institutional survey, the following organizational constraints are observed:

1) Supervision of Construction Works

Construction Department Construction Management Team	Study and Design Department Construction Supervision Team
<ul style="list-style-type: none"> Supervision activities in general 	<ul style="list-style-type: none"> Supervise progress, quality, cost, etc. and approval completion of project works

OIDA’s direct construction works are managed by Construction Management Team and supervised by Construction Supervision Team internally. Quality, quantity and progress management for construction works is crucial, while these works would not be basically achieved within the same organization by using a limited fund and technical staff. Construction works can be made by the other entities and supervision works will be integrated into one unit of OIDA at the head office.

2) Irrigation Extension Works

Community Participation Dept.	Irri. Extension and Water Management Dept.
<ul style="list-style-type: none"> Coordinate community mobilization and organize WUAs 	<ul style="list-style-type: none"> Implement extension works on irrigation farming including water management

At the level of field, community mobilization is made on and before feasibility study works and need to be continued through the construction and O&M stages. On the other hand, the extension works are usually initiated on and after the construction works. In case of OADB, community mobilization is made by joint operation with technical extension staff. There are no specific technical staff members only for community mobilization at the OADB district office. Community mobilization works are continuous works even in the O&M stage and categorized as one of the technical extension subjects. It is necessary to consider the organization and system for community based extension support services. It is important to minimize over employment of OIDA staff that will require further budget allocation and capacity building of newly deployed staff.

3) Watershed Management Works

At the head office, Watershed Management Team under the Irrigation Extension and Water Management Department is organized. On the other hand, the branch offices have no specific staff and activities for watershed management. Taking environmental sustainability of irrigation schemes into consideration, watershed management works with farmers’ mobilization and participation need to be initiated by OIDA at the branch and district offices.

There are two alternative plans for organizational set-up, i.e. (1) including a part of the extension department at the head office and the extension team at the branch offices or (2) separate units at the head office and branch offices. To demarcate soil conservation and afforestation works implementing by Agricultural Bureau, OIDA could focus more on watershed conservation cum water impounding projects for multipurpose use, i.e. domestic water supply, irrigation for community nursery and orchard, etc. OIDA need to cooperate with OAB, specifically for nursery production.

4) Head Office and Branch Offices

Head office management functions and field activities made by the branch offices including the district offices need to be streamlined. Field visit and verification done

by the head office units are not regularly made. The report submission from the district offices to the respective branch offices, and from the branch offices to the respective head office units are not regularly made. Standardizing report forms, submission, consolidation, evaluation and filing are required.

4.3.2 District Administration of Dugda Bora

Present activities of the Dugda Bora district administration office are limited to coordination on economic, social and peace issues, and women's affairs. Most of public investment and their administrative activities are implemented by the district offices of the Oromia Regional State.

There are no technical staff assigned at the district administration office. Of 14 district staff, college graduates are limited only to two (2). Staff training program in the district was initiated in 1998 only. The administration office does not grasp the district status on demography, topography, climate, rural infrastructures, rural constraints, etc. These information and data are collected and consolidated separately by the regional district offices.

There are also no planning functions based on the PA's situation and constraints at the administration office. All of the development programs are planned and implemented directly by the respective regional bureaus and/or NGOs. It will be required to establish district information system under the district administration office as a first step. The multi-sector information will be a basis for initiation of integrated district development planning. The district staff firstly needs their capacity building program.

4.3.3 Peasant Associations and Local Organizations

PA administration units integrated into 54 in number are not fully functioned at present. A large and topographically fragmented territory of PA is considered as one of the reasons for dysfunctional PA administration. A large territory of PA comprises more number of local communities that hardly commute each other.

Consensus creation for regulation and development at the level of PA seems to be harder. Cooperation among the local communities extended largely become more difficult than the previous situation of 109 old PAs. Communal forestry and resources such as trees and grass in the gully area are deteriorated due to their unregulated utilization. Lowering consensus and cooperation in and among the communities are considered as one of the causes for environmental degradation.

Local communities are still indispensable units for awareness creation in the area. Close relation among the farm households in the same community can be observed in the Debbo and Edir. These community organizations usually cover farm households within the same local community and there are a limited organizational activities

among the local communities except celebration of seasonal festivals, wedding, funeral, etc. Miss management and breakdown of wind mills are frequently arisen in case of common use of different local communities. Organizational activities under the different local communities are a keen subject for rural development.

Capacity building program for farm households was implemented mainly by the NGOs in the district. After the project completion, the support activities to realize sustainable operation and management, specifically for rural water supply facilities were not provided. Based on the clarification of constraints against sustainability and inability of local communities and newly established organization, further capacity building program need to be formulated.

CHAPTER 5 MASTER PLAN

5.1 Economic Development

5.1.1 Project Formulation and Implementation for Increase in Rural Employment Opportunity

The constraints against favorable economic development in Dugda Bora District include:

- 1) Insufficient development in agricultural production sector (unstable crop production, low productivity, environmental degradation by over use of farm land and livestock raising, etc.),
- 2) Inferior infrastructures for private investment comparing with other developed areas,
- 3) Limited local resources except agricultural products for processing,
- 4) Lack of support activities for cottage industry promotion including planning, capacity building, organization set-up for implementation, and
- 5) Stagnant cooperative activities for marketing and processing as well as farm input supply.

Employment of rural population in the area heavily relies on crop production and livestock raising. Less employment in the lean cropping season and increase in rural population are one of the fundamental causes for low income level of farm households. Creation of employment opportunities in the area will be made by the rural industrialization as well as rationalization and enhancement of present agricultural sector.

Based on the above current situation in the area, the economic development, specifically through rural industrialization could be implemented as follows :

- I. Plan formulation for stage-wide rural industrialization program (within 3 months after the project commencement)
 - 1) Study on local resources for processing and trading;
 - 2) Verification of marketable commodities that could be produced in the area;
 - 3) Verification of local technologies that could be applied for the processing activities;
 - 4) Participatory planning with the local communities, existing cooperatives and farmers' groups for the potential processing activities;
 - 5) Identification of necessary support services for rural industrialization program;
 - 6) Formulation of implementing organization at the level of government and private organizations including cooperatives;

- 7) Preparation of action plan for rural industrialization.
- II. Capacity building of implementing organizations and participants (for 12 months after (1))
 - 1) Preparation of training program according to the requirement of organizations and participants;
 - 2) Provision of training covering ;
 - Basic courses for cooperative and/or entrepreneur activities (organization and membership, accounting and financial management, and business operation);
 - On-the-job technical training by using the existing advanced organizations;
 - III. Pilot project implementation of selected industrial projects covering interested farmers' organizations (within one year after the commencement of plan formulation (1), and implemented for at least two years)
 - 1) Participatory planning with selected farmers' organizations for the project implementation;
 - 2) Assignment of live-in management staff as required for the projects ;
 - 3) Implementation of the pilot projects with occasional training of participant farmers; and
 - 4) Regular monitoring and evaluation of the project.
 - IV. District-wide plan formulation (within 6 months after the pilot project implementation period) and its implementation with necessary support assistance (for 2 years)
 - 1) Post evaluation of the pilot project;
 - 2) Plan formulation of district-wide project implementation based on the post evaluation of pilot projects; and
 - 3) Implementation of the district-wide projects by assigning trained farmers of the pilot projects.

5.1.2 Development of Community Based Cooperative Organizations

Farmers' organization set-up for procurement of farm inputs, joint-marketing of farm products, dissemination of farming and livelihood improvement technologies, etc. will be indispensable for rational rural development in the area. Taking into consideration of allergic responses from the farmers who have experiences forced by the ex-military administration, organization of cooperatives need to be implemented based on the participatory and community based approaches.

Comparing the private investment such as pump irrigation for vegetable and fruit farming, wider and equitable development effects could be expected by organizing cooperative and enhancing their activities in the area. Community based cooperative

organization will be a key factor for successful development and foundations for equitable rural development. Community based cooperative development will be implemented as follows :

- I. Review and identification of causes on the presently inactive cooperatives (within 2 months after the commencement of the project)
 - 1) Assessment of membership, arrears, facilities, activities of formerly organized and inactive cooperatives;
 - 2) Verification of present administration policy and measures on cooperative restructuring, collection of arrears, etc.; and
 - 3) Participatory assessment of causes for inactive cooperatives.
- II. Preparation of community resource map and inventory at the selected PAs (within 3 months after the commencement of the project)
 - 1) Identification of local communities, their territories, households, land use, public facilities, etc. on the map; and
 - 2) Participatory preparation of inventory data covering farm households (number, location, population), topographic condition, land use (farm land, fallow land, bushes, others), crop production and livestock raising, public and private facilities and their conditions, environmentally critical resources and sites, social and welfare issues, other important information, etc. jointly with farmers.
- III. Preparation of framework plan for organizing and federating primary cooperatives and their potential fields for cooperative activities, and identification of target local communities and farmers for organizing primary cooperatives (within one months after II);
- IV. Participatory identification and assessment of present constraints in the local communities, and action planning for their alleviating measures including cooperative organization (for 2 months after III);
- V. Facilitation to the selected local communities and their farmers for organizing cooperatives (pilot basis), and participatory planning on organizational set-up, priority activities, implementation scheduling, etc.(for one months after IV);
- VI. Provision of necessary support services to organize and activate pilot cooperatives (within 5 months after V);
- VII. Formal registration of pilot cooperatives (within one year since the commencement of the project), and pilot implementation of activities through assignment of skilled cooperative management staff (at least for 2 years);
- VIII. Regular monitoring, audit and evaluation of operation of pilot cooperatives (parallel with VII) ; and

- IX. District-wide plan formulation for cooperative development based on the post evaluation of the pilot cooperatives (within 2 months after VII) and its implementation with necessary support assistance (for 2 years).

5.2 Institutional Development for OIDA

5.2.1 Organizational Realignment

The rationalization and streamlining of the present OIDA organizational set-up need to focus on the following aspects:

- 1) Financially sound deployment of OIDA staff specifically at the district offices;
- 2) Phasing out OIDA's direct construction works and realignment of OIDA organization accordingly;
- 3) Integration of community participation works and units into a part of extension activities;
- 4) Enhancing capacity building of staff and their activities and organizational realignment for watershed management works (a part of existing extension works or done by a separate unit); and
- 5) Establishing management information system (MIS) at and among the respective offices and units.

The OIDA organization was established in July 1999 and the actual OIDA operation is still performed only for two and a half years. Majority of OIDA's present irrigation development works are succeeding works from the former Irrigation Department under OWMERDB and the functional transfer is not completed yet in some fields such as laboratory service activities. In addition, the general manager and the majority of department heads at the head office were replaced in November 2000.

To formulate an applicable plan for rationalization and streamlining of the present OIDA organizational set-up, further verification and discussion with the present OIDA management staff will be required. An organizational realignment needs to be also endorsed to the OIDA board for its approval. To prevent confusions and additional time requirement for organizational arrangement, implementation of re-organization of OIDA would be implemented after at least one year in 2002.

Further organizational assessment, identification of constraints, formulation of framework and implementation plans for re-organization will be made in 2001 and implemented in July 2002. Further discussion with the newly appointed department heads at the head office, branch heads and other key staff, and verification of their activities could be made as a part of the capacity building program for OIDA staff under the verification study in 2001.

5.2.2 Management Information System for OIDA

Appropriate OIDA's administration and project management based on the timely and accurate information will be realized by installing OIDA management Information System. The required fields for information system will be classified as follows :

I. Administrative Information

- 1) Budget planning by recurrent and capital items, units, activities and projects;
- 2) Allocation of fund and monitoring of expenditures by units, activities, and projects;
- 3) Staff composition with educational background, experiences and assignment by kind of duties;
- 4) Fixed asset inventory and monitoring of their conditions and usage;
- 5) Preparation of training program and monitoring of their execution; and
- 6) Report preparation using the above information by the respective units at the head and branch offices.

II. Project and Program Information

- 1) Project sheets (one page per project) with location and layout maps, and summary sheet of the project key information (completed, on-going by phases) ;
- 2) Planning information of the projects and programs by source of fund;
- 3) Monitoring information of the projects and programs including staff assignment, financial status, progress of the works, constraints (financial, technical, social), and required countermeasures for problem solution;
- 4) Technical verification of the projects and programs at FS, design and supervision stages by using check list and analytical software;
- 5) Occasional and post evaluation of the implementing projects and programs by using important indicators that will be set by technical field; and
- 6) Report preparation using the above information by the respective units at the head and branch offices.

III. Management Information

- 1) Consolidation and validation of the above administrative and project/program information, regularly;
- 2) Decision making and instruction to the relevant units based on the information consolidated and validated;
- 3) Leading rational operation by holding regular meeting and communicating at the head and branch offices;
- 4) Report preparation for presentation at the OIDA board and the executive committee; and

- 5) Public information activities.

Further verification is required so as to establish more appropriate MIS. The trial installation was partly initiated in 2001 under the Verification Study.

5.3 Institutional Development for District Administration

Capacity building of the staff at the district administration office is urgently required focussing on consolidation works of district information, and coordination works among the programs and projects implemented by the regional government offices and NGOs. The proposed capacity building program for the district administration staff is summarized as follows :

- 1) Involving the district staff assigned at the economy and social units in the community resource mapping works for transferring participatory information collection and validation technologies;
- 2) Formulation of district information system including collection of the information from the local communities and the regional state offices, consolidation of information collected, monitoring of the district situation by updating the district information; and
- 3) Capacity building to install the district functions for identification of constraints, and projects required for their solutions.

Without capital budget allocation at the district administration office at present, the district administration office will not be a main project implementing agency. Taking into consideration of a limited number of staff and recurrent budget at the district administration office similar to a shortage of available budget at the federal and regional state governments, the full decentralization at the district and zonal administrations from the regional state offices could be realized by the long term programs. Capacity building and strengthening coordination function at the district administration office will be an initial step for decentralization process.

5.4 Project Management Organization

5.4.1 Organization for Irrigation Development

The project management organization will be optimized to meet the administrative and financial management requirement for the project implementation. The institutional set-up will be discussed more in Annex VI on Irrigation Development, the following organizational arrangement is basically necessary for OIDA for smooth implementation of any of irrigation development program under the Master Plan.

- 1) Project Coordinator at the head office

OIDA shall assign a project coordinator at the headquarters and, under his/her control, part time technical staff from the relevant technical departments for the project execution.

2) Central Branch Office

OIDA shall nominate a coordinating technical staff at Central Branch Office to coordinate with the OIDA district office as well as other related offices including the relevant regional state offices, the district administration office and NGOs working in the district.

5.4.2 Organization for Other Rural Development Components

Organization set-up for implementing other rural development components shall be arranged on the basis of the following objectives:

- 1) Installation of integrated rural development approaches at the district level with enhancing the capacity building of the district administration office;
- 2) Creation of community participation into the rural development programs and projects in order to give more opportunities for participation and to enlarge awareness and sense of ownership of the participating farmers; and
- 3) Installation of development fund using for integrated rural development, specifically on irrigated agriculture program, rain-fed agriculture improvement program, modernization program of cattle raising, and environment conservation program that are selected as the priority components for the verification study.

To realize the above objectives, the rural development components will be implemented by the following organizational arrangement:

- 1) Development fund is proposed to be installed at the office of donor agency in Addis Ababa and directly manage the fund by the specialists assigned (Manager/Rural Development, irrigation and rural infrastructure engineer, participatory planning specialist, fund management specialist);
- 2) OIDA and OADB shall assign the coordination staff at the respective head and zonal/branch offices at full-time basis and part-time technical staff upon the proposed projects from the communities at the district and zonal levels;
- 3) Development fund office shall organize the fund management committee comprising the Donor, OIDA and OADB to appraise, approve, monitor and evaluate the projects;

The above organizational set-up shall be finalized and arranged on the basis of the results of the verification study in 2001.

CHAPTER 6 RECOMMENDATIONS

The agricultural and rural development will be lasting challenges in Ethiopia considering magnitude of rural population (86%) and poverty, unstable food production, shortfall of government budget and investment, and environmental deterioration of the resources. Institutional strengthening will be required for rational rural development by using scarce resources. Further participation of local communities and farmers will be needed for sustainable rural development. The development plans and projects need to be formulated considering multi-sector effects in the rural area. Integrated approaches with effective institutional development are only way for rural poverty alleviation and transformation of rural economy.

Enlargement of employment opportunities by the primary agricultural production sector is a fundamental issue for rural development, while the growing rural population could not be absorbed only by the single agricultural sector. Without means for irrigation farming in the dry season, majority of rural population will be idled almost in a half year.

Rural industrialization including cottage industries as well as service sector development is an indispensable approach for rural development in the area. Rural equity could be promoted by organizing and activating community-based farmers' groups and cooperatives that might be core units for rural industrialization.

Sustainability of rural development heavily relies on the capacities of local communities and farmers, and the quality of support assistance from the government and non-government institutions. Capacity building both for beneficiaries and executing institutions is a key issue for sustainable development. In addition, fund provision for small-scale rural investment and initial O&M expenditures is urgently needed to promote and sustain the priority projects in the area. Beside sector-wide investment at the national and regional levels, integrated development approaches taking participation of local communities and farmers by the district level will be effective to make the projects and their investment more sustainable.

The master plan is formulated taking the above issues into consideration. The verification study will provide the further inputs to formulate the plan more realistically and appropriately. It is recommended that the planned approaches, programs and projects formulated by the master plan be initiated accordingly.

APPENDIX I
SOCIO-ECONOMY AND INSTITUTIONS

Tables

Table I.2.1 Basic Demographic Data for Ethiopia, Oromia Region, East Shewa Zone and Dugda Bora District

Area	Population in 1994					Average Household Size			Estimated Household Number		
	Total			Total	Total	in 1994			in 1994		
	Male	Female	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Ethiopia	#####	#####	53,477,265	46,154,058	7,323,207	4.83	4.86	4.65	#####	9,503,572	1,574,133
Oromia Region	9,371,228	9,361,297	18,732,525	16,762,437	1,970,088	4.84	4.89	4.48	3,867,700	3,427,900	439,800
East Shewa Zone	837,614	830,570	1,668,184	1,223,808	444,376	4.82	4.91	4.58	346,200	249,200	97,000
Dugra Bora District	68,105	66,349	134,454	106,424	28,030	4.69	4.74	4.51	28,688	22,476	6,212
PAs	54,532	51,892	106,424	106,424	0	4.74	4.74	0	22,476	22,476	0
Meki Town	9,991	10,469	20,460	0	20,460	4.51	0	4.51	4,536	0	4,536
Alem Tena Town	3,582	3,988	7,570	0	7,570	4.52	0	4.52	1,676	0	1,676
Area	Estimated Population in 2000 (In '000)					Sex Ratio	Share of		Land Area (km ²)	Population Density in 2000 (P./km ²)	
	Total			Total	Total		Population (%)				
	Male	Female	Total	Rural	Urban		Rural	Urban			
Ethiopia	/_1	31,858	31,637	63,495	54,022	9,473	101.3	86.3	13.7	1,097,000	57.9
(Annual growth rate %/year)		(2.85)	(2.95)	(2.90)	(2.66)	(4.38)					
Oromia Region	/_2	11,160	11,194	22,354	19,706	2,648	100.1	89.5	10.5	353,007	63.3
(Annual growth rate %/year)		(2.95)	(3.02)	(2.99)	(2.73)	(5.05)					
East Shewa Zone		997	993	1,990	1,460	530	100.8	73.4	26.6	13,624	146.1
				/_3		/_4					
Dugra Bora District				163			102.6	79.2	26.3	1,468	110.9
PAs				125			105.1	100.0	0	1,452	86.1
Meki Town				28			95.4	0	100.0	14	1,992.8
Alem Tena Town				10			89.8	0	100.0	2	4,842.9

Note : /_1 & /_2 ; Projected population under the medium variant
 /_3 ; Applied by the rate of /_2 (the growth rate of male and female population)
 /_4 ; Applied by the ratios of rural and urban population in 1994
 /_5 ; Applied by the rate of /_2 (the growth rates of rural and urban population)

Source : The Population and Housing Census of Ethiopia for Country Level
 Volume II Analytical Report (Table 2.1, 2.10)
 The 1994 Population and Housing Census of Ethiopia for Oromia Region
 Volume I, Part I (Table 2.1, 2.5, 2.8,), Volume I, Part IV (Table 6.10)

Table I.2.2 Population and Household in Dugra Bora District (1/4)

(1) Summary by PA

No.	Name of PA	1994 Statistics			2000 Estimate/ 2		Population Density (Person/km ²)		
		Population	No. of Total Households	Family Size	Population	No. of Total Households	Area (ha)	1994	2000 Estimate
1	Kersa Gambala	2,170	428	5.1	2,550	500	2,690	81	95
2	Abuno Kumoro	2,387	455	5.2	2,810	540	2,390	100	118
3	Adele Miri	2,076	442	4.7	2,440	519	1,580	131	154
4	Biliti Balewoic	1,498	316	4.7	1,760	374	1,950	77	90
5	Koto Biliti	1,462	288	5.1	1,720	337	3,590	41	48
6	Argo Gadilala	1,696	353	4.8	1,990	415	2,660	64	75
7	Tuchi Denbel	1,662	333	5.0	1,950	390	2,170	77	90
8	Weyu Gebrael	1,874	401	4.7	2,200	468	2,520	74	87
9	Abono Gebrael	1,165	226	5.2	1,370	263	2,020	58	68
10	Dodoti Dembel	1,565	333	4.7	1,840	391	3,670	43	50
11	Mukeye 1	3,219	658	4.9	3,780	771	4,950	65	76
12	Birbisa Guda Sabolac	2,728	602	4.5	3,210	713	3,690	74	87
13	Birbisa Galac	1,895	374	5.1	2,230	437	2,460	77	91
14	Aella Gebre Dalache	1,580	312	5.1	1,860	365	1,450	109	128
15	Menjegso Weji	1,881	338	5.6	2,210	395	3,030	62	73
16	Jero Raka	1,553	296	5.2	1,830	352	1,300	119	141
17	Korkie Adama	1,959	391	5.0	2,300	460	2,300	85	100
18	Goro Korkie	2,281	446	5.1	2,680	525	5,260	43	51
19	Kiltu Ambolac	2,611	552	4.7	3,070	653	3,370	77	91
20	Doyu Laman	1,823	388	4.7	2,140	455	3,240	56	66
21	Tutae Kormetu	2,129	468	4.5	2,500	556	3,150	68	79
22	Koyo Jejeba	1,495	346	4.3	1,760	409	3,370	44	52
23	Huafa Kemelaena	1,502	317	4.7	1,770	377	2,260	66	78
24	Weldia Hafa	1,906	422	4.5	2,240	498	2,240	85	100
25	Beymogusa	1,492	320	4.7	1,750	372	2,780	54	63
26	Dengoroita	1,166	254	4.6	1,370	298	2,140	54	64
27	Mukeye 2	1,585	319	5.0	1,860	372	2,750	58	68
28	Hate Leman	1,470	320	4.6	1,730	376	2,640	56	66
29	Taepa Cherokae	2,319	508	4.6	2,730	593	2,500	93	109
30	Geraba Korki Adi	3,177	635	5.0	3,730	746	2,480	128	150
31	Bekelae Gerise	2,974	615	4.8	3,500	729	2,590	115	135
32	Weldiyo Mekdele	1,120	214	5.2	1,320	254	1,020	110	129
33	Woldia Kelina	4,690	1,065	4.4	5,510	1,252	3,190	147	173
34	Shubi Gamo	3,948	831	4.8	4,640	967	2,330	169	199
35	Tuchi Sumayan	1,841	392	4.7	2,160	460	2,250	82	96
36	Jewae Bofo	1,356	272	5.0	1,590	318	2,360	57	67
37	Oda Bokota	1,253	259	4.8	1,470	306	2,720	46	54
38	Saera Wakelae	1,417	312	4.5	1,670	371	2,640	54	63
39	Darara Dallecha	2,984	634	4.7	3,510	747	2,150	139	163
40	Burke Delecha	2,204	453	4.9	2,590	529	2,080	106	125
41	Jirma Bora	1,950	399	4.9	2,290	467	4,150	47	55
42	Berta Sami	1,814	402	4.5	2,130	473	3,620	50	59
43	Sori Dalesa	1,763	345	5.1	2,070	406	3,740	47	55
44	Tuka Langanano	1,423	302	4.7	1,670	355	1,980	72	84
45	Gose Korke	2,093	443	4.7	2,460	523	3,390	62	73
46	Tuchi Deko	1,444	367	3.9	1,700	436	2,690	54	63
47	Elen	1,522	364	4.2	1,790	426	2,530	60	71
48	Keshi Huluko	1,453	338	4.3	1,710	398	1,730	84	99
49	Lanfesa Germeji	1,481	347	4.3	1,740	405	1,980	75	88
50	Gora Leman/ 1	(735)	(245)	3.0	(860)	(287)	2,070	36	42
51	Dodo Wedera	3,675	804	4.6	4,320	939	2,760	133	157
52	Malima Terae Beri	3,015	681	4.4	3,540	805	2,750	110	129
53	Tubae Suti	1,991	442	4.5	2,340	520	2,730	73	86
54	Dalota Mati	1,687	354	4.8	1,980	413	3,160	53	63
	Sub-total	106,424	22,476	4.7	125,080	26,419	145,210	73	86
	Meki Town	20,460	4,536	4.5	27,500	6,111	1,380	1,483	1,993
	Alem Tena Town	7,570	1,676	4.5	10,170	2,260	210	3,605	4,843
	Total	134,454	28,688	4.7	162,750	34,790	146,800	92	111

Note : /_1 ; Not listed in the Census, the population included in PA No. of 49, 51 and 52 (surrounding PAs

The figures in () are information from the District Office.

/_2 ; Applied the population growth rate of 2.73%/year for PA and 5.05%/year for two towns (Average growth rates of Oromia Region)

Source : The 1994 Population and Housing Census of Ethiopia for Oromia Region
Volume I, Part VI (Table 2.1, 2.4, 7.3)
Dugra Bora District Administration Office

Table I.2.2 Population and Household in Dugra Bora District (2/4)

(2) List of PAs (Old and New) (1/3)

New PA Grouping			Old PA Grouping				
No. on Map	Original Name	Corrected Name	No.	Name of PA (Population Statistic)	Population	No. of Households	Family Size
1.	Kersa Gambala	Kersa Gambala	1.	Kersa Gambala	2,170	428	5.1
			73.	Gambela Genglechisa	1,275	243	5.2
			74.	Gambala Kersa	895	185	4.8
2.	Abene Kumorc	Abuno Kumorc	2.	Abuno Kumoro	2,387	455	5.2
			71.	Arbo Meteja	1,092	208	5.3
			72.	Abuno Kumuro	1,295	247	5.2
3.	Adie Mirt	Adele Mirt	3.	Adele Mirt	2,076	442	4.7
			69.	Adele Mirt	1,211	255	4.7
			70.	Adele Meteja	865	187	4.6
4.	Biliti Balewoid	Biliti Balewoid	4.	Biliti Balewoid	1,498	316	4.7
			52.	Biliti And	725	154	4.7
			53.	Biliti Hulet	773	162	4.8
5.	Koto Biliti	Koto Biliti	5.	Koto Biliti	1,462	288	5.1
			54.	Koto	455	88	5.2
			55.	Biliti Sosit	1,007	200	5.0
6.	Argo Gadilala	Argo Gadilala	6.	Argo Gadilala	1,696	353	4.8
			56.	Gadilala Biliti	1,024	199	5.1
			57.	Argo	672	154	4.4
7.	Tuchi Denbel	Tuchi Denbel	7.	Tuchi Denbel	1,662	333	5.0
			67.	Bado Gosa	797	154	5.2
			68.	Tuchi Gebrael	865	179	4.8
8.	Weyu Gebrael	Weyu Gebrael	8.	Weyu Gebrael	1,874	401	4.7
			65.	Weyu Gebrael	1,839	387	4.8
			66.	Soroti Limat	35	14	2.5
9.	Aboro Gebriel	Abono Gebrael	9.	Abono Gebrael	1,165	226	5.2
			64.	Abono Gebrael	1,165	226	5.2
			58.	Chelelekina Germej	988	214	4.6
10.	Dodoti Dembel	Dodoti Dembel	10.	Dodoti Dembel	1,565	333	4.7
			63.	Guragermaj	577	119	4.8
			30.	Wedaesha	887	195	4.5
11.	Mukiye I	Mukeye I	11.	Mukeye I	3,219	658	4.9
			31.	Laluna Daero	704	147	4.8
			50.	Meja	969	191	5.1
12.	Birbirsu Guda Sabole	Birbisa Guda Sabolae	12.	Birbisa Guda Sabolae	2,728	602	4.5
			9.	Aella Sabolae	1,161	257	4.5
			15.	Bejektu	697	163	4.3
13.	Birbirsu Gale	Birbirsu Galae	13.	Birbirsu Galae	1,895	374	5.1
			16.	Derebana Birbirsu	870	182	4.8
			17.	Kuraena Galae	1,163	222	5.2
14.	Eela Gebre Daiech	Aella Gebre Dalacha	14.	Aella Gebre Dalacha	1,580	312	5.1
			8.	Aella Gebre Dalacha	1,580	312	5.1
			19.	Birbirsana Bitisi	732	152	4.8
15.	Menjegso Weji	Menjegso Weji	15.	Menjegso Weji	1,881	338	5.6
			7.	Lubaena Tungugi	1,021	175	5.8
			18.	Menjegso	860	163	5.3
16.	Joro Reka	Jero Raka	16.	Jero Raka	1,553	296	5.2
			6.	Jero Raka	1,553	296	5.2
			17.	Korkie Adama	1,959	391	5.0
17.	Korke Adama	Korkie Adama	4.	Adama Fesosa	966	199	4.9
			5.	Korkie Raka	993	192	5.2
			18.	Goro Korkie	2,281	446	5.1
18.	Goro Korke	Goro Korkie	1.	Kiltu Belbila	1,029	190	5.4
			2.	Korkie Kebtie	686	136	5.0
			3.	Kelo	566	120	4.7
19.	Kiltu Ombolae	Kiltu Ambolae	19.	Kiltu Ambolae	2,611	552	4.7
			75.	Ambolae	1,166	262	4.5
			76.	Ambasesa	855	166	5.2
20.	Doyo Laman	Doyu Lamar	20.	Doyu Laman	1,823	388	4.7
			77.	Hetae Ambalae	590	124	4.8
			79.	Kilae Doyu	860	175	4.9
			80.	Doyu Koremtu	963	213	4.5

Table I.2.2 Population and Household in Dugra Bora District (3/4)

(2) List of PAs (Old and New) (2/3)

New PA Grouping			Old PA Grouping				
No. on Map	Original Name	Corrected Name	No.	Name of PA (Population Statistic)	Population	No. of Households	Family Size
21.	Tute Koremtu	Tutae Kormetu	21.	Tutae Kormetu	2,129	468	4.5
			78.	Tutae Jejeba	1,211	267	4.5
			90.	Korke Kormetu	918	201	4.6
22.	Koye Jejeba	Koyo Jejeba	22.	Koyo Jejeba	1,495	346	4.3
			10.	Koyo	729	162	4.5
			11.	Jejeba	766	184	4.2
23.	Hafe Kemalc	Huafa Kemelaena	23.	Huafa Kemelaena	1,502	317	4.7
			13.	Huafa Ealla	743	148	5.0
			14.	Kemelaena Dubeta	759	169	4.5
24.	Weldia Hafa	Weldia Hafa	24.	Weldia Hafa	1,906	422	4.5
			12.	Afa Aele	718	149	4.8
			24.	Woldia Kocha	1,188	273	4.4
25.	Beymogus	Beymogus	25.	Beymogusa	1,492	320	4.7
			22.	Gusa Hulet	848	194	4.4
			23.	Beymo	644	126	5.1
26.	Dongorota	Dengoroita	26.	Dengoroita	1,166	254	4.6
			20.	Dengoroita	603	126	4.8
			21.	Gusa And	563	128	4.4
27.	Mukiya 2	Mukeye 2	27.	Mukeye 2	1,585	319	5.0
			28.	Mukuyo Akakelae	754	155	4.9
			29.	Mukuyo	831	164	5.1
28.	Hate Leman	Hate Leman	28.	Hate Leman	1,470	320	4.6
			32.	Hatae Fegurae	606	139	4.4
			33.	Hati Mitu	864	181	4.8
29.	Tepho Choroke	Taepa Cheroxae	29.	Taepa Cheroxae	2,319	508	4.6
			49.	Cheroxae	1,350	284	4.8
			59.	Taepa Meto Arba	969	224	4.3
30.	Giraba Korke Adi	Geraba Korki Adi	30.	Geraba Korki Adi	3,177	635	5.0
			34.	Geraba Jarso	1,344	270	5.0
			48.	Korki Adi	1,833	365	5.0
31.	Bekele Girisa	Bekelae Gerisa	31.	Bekelae Gerisa	2,974	615	4.8
			46.	Bekelae	1,916	395	4.9
			47.	Wachona Gerisa	1,058	220	4.8
32.	Weldiyo Mekidela	Weldiyo Mekdela	32.	Weldiyo Mekdela	1,120	214	5.2
			60.	Mekdela	1,120	214	5.2
33.	Weldiyo Kelina	Woldia Kelina	33.	Woldia Kelina	4,690	1,065	4.4
			61.	Woldia Chetae	2,291	507	4.5
			62.	Kelina Werebo	2,399	558	4.3
34.	Saubi Gamo	Shubi Gamo	34.	Shubi Gamo	3,948	831	4.8
			44.	Gemuda Gelegele	2,041	428	4.8
			45.	Keraru Shubi	1,907	403	4.7
35.	Tuchi Sumeyc	Tuchi Sumayan	35.	Tuchi Sumayan	1,841	392	4.7
			38.	Tuchi Geragona	1,525	322	4.7
			39.	Raso Sumayan	316	70	4.5
36.	Jewae Bofa	Jewae Bofa	36.	Jewae Bofa	1,356	272	5.0
			25.	Geraba Jewae	522	95	5.5
			37.	Bofa	834	177	4.7
37.	Oda Bokota	Oda Bokota	37.	Oda Bokota	1,253	259	4.8
			35.	Oda	587	121	4.9
			36.	Geribafela	666	138	4.8
38.	Sera Wekele	Saera Wakelae	38.	Saera Wakelae	1,417	312	4.5
			26.	Saera	933	202	4.6
			27.	Wakelae	484	110	4.4
39.	Derara Daiecha	Darara Dallecha	39.	Darara Dallecha	2,984	634	4.7
			40.	Dallecha	1,556	303	5.1
			43.	Darara	1,428	331	4.3
40.	Burka Debrebeg	Burke Delecha	40.	Burke Delecha	2,204	453	4.9
			41.	Burke Delecha	1,480	319	4.6
			42.	Debre Bege	724	134	5.4

Table I.2.2 Population and Household in Dugra Bora District (4/4)

(2) List of PAs (Old and New) (3/3)

New PA Grouping			Old PA Grouping				
No. on Map	Original Name	Corrected Name	No.	Name of PA (Population Statistic)	Population	No. of Households	Family Size
41.	Jirme Bora	Jirma Bora	41.	Jirma Bora	1,950	399	4.9
			106.	Jirma	940	198	4.7
			108.	Bora Toljeno	560	117	4.8
42.	Berta Sami	Berta Sami	109.	Bora Mariam	450	84	5.4
			42.	Berta Sami	1,814	402	4.5
			103.	Sami	597	144	4.1
43.	Sori Dolesa	Sori Dalesa	104.	Berta	746	170	4.4
			105.	Berta Koremtu	471	88	5.4
			43.	Sori Dalesa	1,763	345	5.1
44.	Tuka Largamc	Tuka Langanc	91.	Dalesa	1,248	242	5.2
			102.	Sori	515	103	5.0
			44.	Tuka Langano	1,423	302	4.7
45.	Gose Korke	Gose Korke	92.	Langano	588	116	5.1
			101.	Tuka Koremtu	835	186	4.5
			45.	Gose Korke	2,093	443	4.7
46.	Tuchi Deko	Tuchi Deko	88.	Gose Choroke	976	204	4.8
			89.	Korke Haga	1,117	239	4.7
			46.	Tuchi Deko	1,444	367	3.9
47.	Elen	Elen	93.	Rado	748	168	4.5
			94.	Dako	696	199	3.5
			47.	Elen	1,522	364	4.2
48.	Kushe Huluc	Keshi Huluc	95.	Golode	746	185	4.0
			96.	Jaraweyae	776	179	4.3
			48.	Keshi Huluko	1,453	338	4.3
49.	Lafesa Germeji	Lanfesa Germeji	81.	Keshi	674	150	4.5
			87.	Korke Huluko	779	188	4.1
			49.	Lanfesa Germeji	1,481	347	4.3
50.	Gora Leman / 1	Gora Leman	82.	Lanfesa Tumuga	706	160	4.4
			83.	Germeji Huruta	775	187	4.1
					(753)	(245)	(3)
51.	Dodo Wedera	Dodo Wedera		Goranecho			
				Gora Gili			
			51.	Dodo Wedera	3,675	804	4.6
52.	Malema Jere Bera	Malima Terae Beri	85.	Wedera	2,036	431	4.7
			96.	Dodo	1,639	373	4.4
			52.	Malima Terae Beri	3,015	681	4.4
53.	Tubae Suti	Tubae Suti	84.	Terae Beri	1,433	339	4.2
			97.	Malima	1,582	342	4.6
			53.	Tubae Suti	1,991	442	4.5
54.	Dalota Mati	Dalota Mati	98.	Suti	679	158	4.3
			99.	Tubae Elala	1,312	284	4.6
			54.	Dalota Mati	1,687	354	4.8
			100.	Dalota	844	181	4.7
			107.	Mati	843	173	4.9

Note : /_1 ; Not listed in the Census, the population included in PA No. of 49, 51 and 52 (surrounding PA

The figures in () are information from the District Office

Not including Meki and Alem Tena Town

Table I.2.3 Demography by Ethnic Groups and Religion for Ethiopia, Oromia Region, East Shewa Zone and Dugda Bora District, 1995

Item	Ethiopia		Oromia Region		East Shewa Zone		Dugra Boda District	
	Population	(%)	Population	(%)	Population	(%)	Population	(%)
I Ethnic Groups								
Affar	979,367	1.8	937	0	258	0	0	0
Amara	16,007,933	30.1	1,684,128	9.1	279,706	16.8	11,130	8.3
Gedeo	639,905	1.2	180,215	1.0	77	0	0	0
Guragie	2,290,274	4.3	172,596	0.9	62,008	3.7	18,893	14.1
Hadiya	927,933	1.7	38,834	0.2	28,591	1.7	0	0
Keffa	599,188	1.1	39,014	0.2	182	0	0	0
Oromo	17,080,318	32.1	#####	85.0	1,160,969	69.6	97,862	72.8
Sidama	1,842,314	3.5	19,445	0.1	1,387	0.1	0	0
Somalie	3,160,540	5.9	107,811	0.6	1,365	0.1	0	0
Tigraway	3,284,568	6.2	67,456	0.4	20,914	1.3	1,027	0.8
Welaita	1,269,216	2.4	41,905	0.2	29,612	1.8	777	0.6
Gamo	719,847	1.4	2,367	0	255	0	1	0
Others	4,330,873	8.3	409,638	2.3	82,860	4.9	4,764	3.4
Total	53,132,276	100.0	#####	100.0	1,668,184	100.0	134,454	100.0
II. Religion								
Orthodox	26,877,660	50.6	7,621,727	41.3	980,201	58.8	127,657	94.9
Protestant	5,405,107	10.2	1,588,310	8.6	57,816	3.5	832	0.6
Catholic	459,548	0.9	107,310	0.6	14,222	0.9	1,014	0.8
Muslim	17,412,431	32.8	8,178,085	44.3	584,012	35.0	3,113	2.3
Others	478,226	0.9	180,235	1.0	3,469	0.2	61	0
Traditional	2,455,053	4.6	778,359	4.2	26,231	1.6	1,702	1.3
Not stated	42,756	0	19,794	0	2,233	0	75	0.1
Total	53,130,781	100.0	#####	100.0	1,668,184	100.0	134,454	100.0

Source : The Population and Housing Census of Ethiopia for Country Level
Volume II Analytical Report (Table 2.14, 2.20)
The 1994 Population and Housing Census of Ethiopia for Oromia Region
Volume I, Part I (Table 2.12, 2.13, 2.19A, 2.20)

Table I.2.4 Literacy Rates for Ethiopia, Oromia Region, East Shewa Zone and Dugda Bora District (Aged Ten Years and over)

Area	Percentage (%) to the Population aged ten years and over								
	Total			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ethiopia	30	17	23	22	9	15	77	61	69
Oromia Region	29	16	22	23	9	16	77	60	69
East Shewa Zone	42	30	36	27	13	20	81	67	74
Dugra Bora District	29	15	22	19	5	13	65	47	56

Source : The Population and Housing Census of Ethiopia for Country Level
Volume II Analytical Report (Table 3.6)
The 1994 Population and Housing Census of Ethiopia for Oromia Region
Volume I, Part I (Table 3.7)

Table I.2.5 Economically Active Population and Unemployed Population Aged Ten Years and Over for Ethiopia, Oromia Region, East Shewa Zone and Dugda Bora District

Area	Economically Active Population			Unemployed Population				
	Rural	Urban	Total	Rural	Urban	Total	Male	Female
Ethiopia (%)	23,745,764 (76.4)	2,757,292 (49.7)	26,503,056 (72.4)	165,026 (0.7)	605,817 (22.0)	770,843 (2.9)	415,716 (2.8)	355,127 (3.1)
Oromia Region (%)	8,726,360 (78.7)	692,755 (47.8)	9,419,115 (75.1)	52,283 (0.6)	106,491 (15.4)	158,774 (1.7)	87,342 (1.7)	71,432 (1.7)
East Shewa Zone (%)	621,984 (75.8)	160,854 (47.5)	782,838 (67.6)	6,921 (1.1)	39,040 (24.3)	45,961 (5.9)	25,443 (5.6)	20,518 (6.3)
Dugra Bora District								
Meki Towm (%)	-	7,693 (51.7)	7,693 (51.7)	-	886 (11.5)	886 (11.5)	543 (12.1)	343 (10.8)
Alem Tena Town (%)	-	2,733 (48.7)	2,733 (48.7)	-	133 (4.9)	133 (4.9)	91 (5.2)	42 (4.3)

Source : The Population and Housing Census of Ethiopia for Country Level
Volume II Analytical Report (Table 3.6, 4.1, 4.3)
The 1994 Population and Housing Census of Ethiopia for Oromia Region
Volume I, Part II (Table 4.2, 4.6,)

Table I.2.6 Economically Active Population Aged 10 Years and Over by Major Industries for Ethiopia and Oromia Region

Major Industries	Ethiopia Total								Oromia Region					
	Total		Rural		Urban		Total		Rural		Urban			
	('000)	(%)	('000)	(%)	('000)	(%)	('000)	(%)	('000)	(%)	('000)	(%)		
1. Agriculture, Forestry, and Fishery	23,116.0	89.3	22,812.2	96.6	303.7	13.4	8,574.5	92.2	8,461.0	97.4	113.5	18.5		
2. Mining and Quarrying	15.2	0.1	7.6	0	7.6	0.3	6.9	0.1	3.4	0.0	3.5	0.6		
3. Manufacturing	468.7	1.8	192.2	0.8	276.5	12.2	92.4	1.0	44.4	0.5	48.0	7.8		
4. Electricity, Gas and Water Supply	21.6	0.1	2.1	0	19.6	0.9	5.2	0.1	1.3	0.0	3.9	0.6		
5. Construction	78.3	0.3	8.6	0	69.7	3.1	17.1	0.2	3.2	0.0	13.8	2.3		
6. Wholesale, Retail Trade Repair of Goods	618.4	2.4	182.4	0.8	435.9	19.2	159.5	1.7	40.1	0.5	119.4	19.5		
7. Hotels and Restaurants	470.1	1.8	203.9	0.9	266.2	11.7	154.0	1.7	58.9	0.7	95.1	15.5		
8. Transport, Storage and Communication	143.6	0.6	13.2	0.1	130.3	5.8	37.7	0.4	5.3	0.1	32.4	5.3		
9. Government Employees	262.5	1.0	27.5	0.1	235.0	10.4	75.0	0.8	15.5	0.2	59.4	9.7		
10. Others	688.8	2.6	167.1	0.7	521.7	23.0	176.9	1.8	53.8	0.6	123.1	20.2		
Total	25,883.2	100.0	23,617.0	100.0	2,266.2	100.0	9,299.2	100.0	8,686.9	100.0	612.3	100.0		

Source : The Population and Housing Census of Ethiopia for Country Level
Volume II Analytical Report (Table 4.9)

Table I.2.7 Distribution of Rural Households by Domestic Expenditure Classification

Class of Domestic Expenditure (Birr/year)	Ethiopia		Oromia		Addis Ababa	
	Distribution (%)	Cumulative (%)	Distribution (%)	Cumulative (%)	Distribution (%)	Cumulative (%)
Below 600	0.3	0.3	0.1	0.1	0	0.0
600 - 999	1.1	1.3	0.7	0.8	0.8	0.8
1,000 - 1,399	2.2	3.5	1.0	1.8	0.8	1.6
1,400 - 1,999	6.5	10.0	3.0	4.8	3.4	5.0
2,000 - 2,599	9.3	19.2	6.0	10.8	0.8	5.8
2,600 - 3,399	13.4	32.6	9.5	20.3	11.8	17.6
3,400 - 4,199	14.7	47.3	13.4	33.7	4.0	21.6
4,200 - 5,399	18.3	65.6	18.5	52.2	11.7	33.3
5,400 - 6,599	13.1	78.8	16.3	68.5	13.1	46.3
6,600 - 8,999	13.5	92.2	19.4	88.0	20.3	66.6
9,000 - 12,599	6.1	98.4	9.3	97.3	20.2	86.8
12,600 - 16,199	1.1	99.4	1.6	98.9	6.0	92.8
16,200 - 19,999	0.4	99.8	0.7	99.6	1.8	94.6
20,000 and Over	0.2	100.0	0.4	100.0	5.4	100.0
Total	100.0		100.0		100.0	

Source : Revised Report on the 1995/96 Household Income, Consumption and Expenditure Survey
Central Statistical Authority (Table 1r)

Table I.2.8 Distribution of Rural Households by Income Classification

Class of Income (Birr/year)	Ethiopia		Oromia		Addis Ababa	
	Distribution (%)	Cumulative (%)	Distribution (%)	Cumulative (%)	Distribution (%)	Cumulative (%)
Below 600	0.7	0.7	0.2	0.2	0	0.0
600 - 999	2.2	2.9	1.4	1.6	0.8	0.8
1,000 - 1,399	3.8	6.7	2.2	3.9	2.5	3.3
1,400 - 1,999	8.5	15.1	5.9	9.8	1.7	5.0
2,000 - 2,599	10.1	25.2	7.8	17.6	9.9	14.8
2,600 - 3,399	14.7	39.9	11.8	29.4	7.7	22.5
3,400 - 4,199	13.3	53.3	13.4	42.8	5.8	28.3
4,200 - 5,399	16.1	69.4	17.3	60.1	11.8	40.1
5,400 - 6,599	9.9	79.2	10.7	70.8	6.6	46.8
6,600 - 8,999	11.4	90.6	15.0	85.9	19.2	65.9
9,000 - 12,599	6.1	96.7	9.0	94.9	15.5	81.4
12,600 - 16,199	2.0	98.8	2.9	97.8	6.6	88.0
16,200 - 19,999	0.7	99.4	1.1	98.8	5.9	94.0
20,000 and Over	0.6	100.0	1.2	100.0	6.0	100.0
Total	100.0		100.0		100.0	

Source : Revised Report on the 1995/96 Household Income, Consumption and Expenditure Survey
Central Statistical Authority (Table 2r)

Table I.2.9 Average Rural Household Expenditure by Item

Item	Ethiopia		Oromia		Addis Ababa	
	Amount (Birr)	Proportion (%)	Amount (Birr)	Proportion (%)	Amount (Birr)	Proportion (%)
Food	3,022	54.2	3,468	53	5,565	54.3
Beverages	22	0.4	24	0.4	11	0.1
Cigarettes & Tobacco	23	0.4	40	0.6	9	0.1
Clothing & Footwear	535	9.6	662	10.1	1,233	12
Rent, Fuels, Power, Water, Construction	881	15.8	966	14.8	1,087	10.6
Furniture, Furnishing, HH Equipment	262	4.7	436	6.7	569	5.6
Medical Care, Health Expenses	61	1.1	81	1.2	69	0.7
Transport & Communication	61	1.1	82	1.2	272	2.6
Recreation, Entertainment, Education	21	0.4	28	0.4	126	1.2
Personal Care & Effects	74	1.3	88	1.3	114	1.1
Miscellaneous Goods & Services	271	4.9	293	4.5	659	6.4
Others	339	6.1	378	5.8	535	5.3
Total	5,573	100.0	6,544	100.0	10,249	100.0

Source : Revised Report on the 1995/96 Household Income, Consumption and Expenditure Survey
Central statistical Authority (Table 3r)

Table I.2.10 Average Rural Household Income by Source

Source of Income	Ethiopia		Oromia		Addis Ababa	
	Amount (Birr)	Proportion (%)	Amount (Birr)	Proportion (%)	Amount (Birr)	Proportion (%)
Household Agriculture Income	3,788	69.9	4,505	72.4	7,600	34.6
Non-Agricultural Income	340	6.3	357	5.7	950	4.3
Wages and Salaries	139	2.6	156	2.5	841	3.8
Income form Rent/House, machinery, etc.	127	2.3	120	1.9	397	1.8
Receipt form Deposit	94	1.7	90	1.4	78	0.4
Income form Share Profit	1	0	0	0	0	0
Income from Gifts/Obtained	796	14.7	870	14	681	3.1
Others	131	2.5	129	2.1	11,397	52
Total	5,417	100.0	6,226	100.0	21,943	100.0

Source : Revised Report on the 1995/96 Household Income, Consumption and Expenditure Survey
Central statistical Authority (Table 4r)

Table I.3.1 Staff Composition of OIDA Head Office, as of October 2000

Department/Divisions	Present No. of Staff			No. of Staff with College Diploma
	Total	Technical	Support	
1. Office of General Manger	5	1	4	4
2. Audit Service	1	1	0	1
3. Planning and Programming Service	5	4	1	3
4. Research and Laboratory Service	5	4	1	3
5. Administration and Finance Service	46	0	46	10
5.1 Office of Head	1	0	1	1
5.2 Personnel Division	8	0	8	3
5.3 Finance Division	8	0	8	3
5.4 Property Administration and General Service Division	26	0	26	2
5.4.1 Division Head	1	0	1	1
5.4.2 General Service Section	19	0	19	0
5.4.3 Property Admini. Section	6	0	6	1
5.5 Garage and Transportation Division	3	0	3	1
6. Study and Design Department	18	17	1	17
6.1 Office of Department Head	2	1	1	1
6.2 Study and Design Team	12	12	0	12
6.3 Construction Supervision Team	4	4	0	4
7. Construction Department	6	5	1	5
7.1 Office of Department Head	2	1	1	1
7.2 Contract Administration Team	1	1	0	1
7.3 Construction Management Team	3	3	0	3
8. Irrigation Extension and Water Management Department	8	6	2	6
8.1 Office of Department Head	3	1	2	1
8.2 Irrigation Extension and Water Management Team	2	2	0	2
8.3 Watershed Management Team	3	3	0	3
9. Community Participation Department	8	7	1	7
9.1 Office of Department Head	2	1	1	1
9.2 Community Mobilization Team	3	3	0	3
9.3 Training Team	3	3	0	3
Total	102	45	57	56

Table I.3.2 Staff Composition of OIDA Branch Offices, as of October 2000

Department/Divisions	Present No. of Staff			No. of Staff with College Diploma
	Total	Technical	Support	
1. Central Branch Office	136	72	64	42
Office of Branch Head	3	1	2	1
Planning and Programming Service	4	3	1	3
Administration and Financial Service	14	0	14	2
Transportation and Garage Service	57	19	38	1
Study and Design Team	18	17	1	13
Construction Team	29	21	8	12
Community Mobilization Team	6	6	0	5
Extension and Water Management Team	5	5	0	5
2. Western Branch Office	121	51	70	44
Office of Branch Head	5	1	4	2
Planning and Programming Service	3	2	1	2
Administration and Financial Service	16	0	16	0
Transportation and Garage Service	45	8	37	2
Study and Design Team	18	17	1	17
Construction Team	29	20	9	18
Community Mobilization Team	2	0	2	0
Extension and Water Management Team	3	3	0	3
3. Eastern Branch Office	82	32	50	29
Office of Branch Head	3	0	3	0
Planning and Programming Service	1	1	0	1
Administration and Financial Service	13	0	13	0
Transportation and Garage Service	30	3	27	3
Study and Design Team	11	11	0	11
Construction Team	22	15	7	12
Community Mobilization Team	0	0	0	0
Extension and Water Management Team	2	2	0	2
4. Southern Branch Office	68	32	36	28
Office of Branch Head	1	0	1	0
Planning and Programming Service	3	2	1	2
Administration and Financial Service	11	0	11	0
Transportation and Garage Service	23	4	19	2
Study and Design Team	11	11	0	11
Construction Team	17	14	3	12
Community Mobilization Team	1	0	1	0
Extension and Water Management Team	1	1	0	1
Total 4 Branch Offices	407	187	220	143
Office of Branch Head	12	2	10	3
Planning and Programming Service	11	8	3	8
Administration and Financial Service	54	0	54	2
Transportation and Garage Service	155	34	121	8
Study and Design Team	58	56	2	52
Construction Team	97	70	27	54
Community Mobilization Team	9	6	3	5
Extension and Water Management Team	11	11	0	11

Table I.3.3 OIDA District Officers, as of October 2000

Department/Divisions	No. of District		Present No. of Staff			No. of Staff with College Diploma
	Total	Covered by OIDA	Total	Technical	Support	
1. Central Branch Office	67	32	103	95	8	83
East Shewa	12	7	31	26	5	24
West Shewa	23	10	27	27	0	25
North Shewa	12	5	10	10	0	8
Arsi	20	10	35	32	3	26
2. Western Branch Office	59	15	70	65	5	62
Jimma	13	3	12	11	1	11
Iluababor	12	2	14	13	1	11
West Wollega	17	5	19	18	1	18
East Wollega	17	5	25	23	2	22
3. Eastern Branch Office	25	13	34	34	0	26
East Hararge	15	7	20	20	0	19
West Hararge	10	6	14	14	0	7
4. Southern Branch Office	29	9	4	4	0	4
Bale	17	6	2	2	0	2
Borena	12	3	2	2	0	2
Total	180	69	211	198	13	175

Table I.3.5 Technical Staff Composition of Irrigation Department under WMERDB and OIDA by Specialty and Office (1/4)

Specialty	Number of Staff									
	WMERDB, Irrigation Department (1998)					OIDA (2000)				
	Dip	BS	MS	PhD	Total	Dip	BS	MS	PhD	Total
I. Head Office										
Management	0	0	0	0	0	0	5	0	0	5
Agricultural Engineer	0	1	2	0	3	1	3	4	0	8
Irrigation Engineer	0	2	1	0	3	0	3	3	0	6
Civil Engineer	0	0	0	0	0	0	0	0	0	0
Agricultural Economist	0	0	0	0	0	0	4	2	0	6
Irrigation Agronomist	0	0	0	0	0	0	1	2	0	3
Hydraulic Engineer	0	3	1	0	4	0	2	2	0	4
Hydrologist	0	0	2	0	2	0	2	3	0	5
Sociologist	0	0	0	0	0	0	2	0	0	2
Geologist	0	0	0	0	0	0	1	0	0	1
Pedologist	0	0	0	0	0	0	0	0	0	0
Water Management Engineer	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation Engineer	0	0	2	0	2	0	0	0	0	0
Irrigation Technician	0	0	0	0	0	0	0	0	0	0
Building Engineer	0	0	0	0	0	0	0	0	0	0
Electrician	0	0	0	0	0	0	0	0	0	0
Draftman	1	0	0	0	1	2	0	0	0	2
Surveyor	2	0	0	0	2	3	0	0	0	3
Mechanical.General Agriculture, Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	3	6	8	0	17	6	23	16	0	45
II. Branch/Zonal Offices										
Western Branch (Jinmma, Illuababor, West Wollega, East Wollega)										
Management	0	0	0	0	0	0	0	0	0	0
Agricultural Engineer	6	8	2	0	16	8	11	1	0	20
Irrigation Engineer	4	1	2	0	7	3	1	0	0	4
Civil Engineer	0	1	0	0	1	0	0	0	0	0
Agricultural Economist	0	1	0	0	1	0	2	0	0	2
Irrigation Agronomist	2	1	1	0	4	0	1	0	0	1
Hydraulic Engineer	1	2	0	0	3	0	0	0	0	0
Hydrologist	1	0	0	0	1	2	0	0	0	2
Sociologist	0	1	0	0	1	0	0	0	0	0
Geologist	0	1	0	0	1	0	1	0	0	1
Pedologist	0	0	0	0	0	0	1	0	0	1
Water Management Engineer	0	0	0	0	0	1	0	0	0	1
Soil and Water Conservation Engineer	0	1	0	0	1	0	0	0	0	0
Irrigation Technician	2	0	0	0	2	0	0	0	0	0
Building Engineer	1	0	0	0	1	2	0	0	0	2
Electrician	0	0	0	0	0	2	0	0	0	2
Draftman	2	0	0	0	2	1	0	0	0	1
Surveyor	9	0	0	0	9	6	0	0	0	6
Mechanical.General Agriculture, Others	0	0	0	0	0	8	0	0	0	8
Sub-Total	28	17	5	0	50	33	17	1	0	51

**Table I.3.5 Technical Staff Composition of Irrigation Department
under WMERDB and OIDA by Specialty and Office (2/4)**

Speciality	Number of Staff									
	WMERDB, Irrigation Department (1998)					OIDA (2000)				
	Dip	BS	MS	PhD	Total	Dip	BS	MS	PhD	Total
Eastern Branch (East Hararga, West Hararga)										
Management	0	0	0	0	0	0	0	0	0	0
Agricultural Engineer	5	3	1	0	9	7	9	0	0	16
Irrigation Engineer	2	0	2	0	4	2	1	0	0	3
Civil Engineer	0	1	0	0	1	0	0	0	0	0
Agricultural Economist	0	0	0	0	0	0	1	0	0	1
Irrigation Agronomist	5	0	1	0	6	1	2	0	0	3
Hydraulic Engineer	0	0	0	0	0	0	0	0	0	0
Hydrologist	1	0	0	0	1	1	0	0	0	1
Sociologist	0	0	0	0	0	0	0	0	0	0
Geologist	0	3	0	0	3	0	0	0	0	0
Pedologist	0	0	0	0	0	0	0	0	0	0
Water Management Engineer	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation Engineer	0	0	0	0	0	0	0	0	0	0
Irrigation Technician	0	0	0	0	0	0	0	0	0	0
Building Engineer	2	0	0	0	2	0	0	0	0	0
Electrician	0	0	0	0	0	0	0	0	0	0
Draftman	2	0	0	0	2	3	0	0	0	3
Surveyor	6	0	0	0	6	1	0	0	0	1
Mechanical General Agriculture, Others	0	0	0	0	0	4	0	0	0	4
Sub-Total	23	7	4	0	34	19	13	0	0	32
Central Branch (North Shewa West Shewa, East Shewa, Aris)										
Management	0	0	0	0	0	2	0	0	0	2
Agricultural Engineer	10	12	0	0	22	10	4	0	0	14
Irrigation Engineer	4	3	0	0	7	2	4	0	0	6
Civil Engineer	1	0	0	0	1	0	0	0	0	0
Agricultural Economist	0	2	0	0	2	0	3	0	0	3
Irrigation Agronomist/Plant Science	4	2	1	0	7	2	1	1	0	4
Hydraulic Engineer	2	2	1	0	5	0	1	0	0	1
Hydrologist	1	0	0	0	1	0	0	0	0	0
Sociologist	0	1	0	0	1	0	0	0	0	0
Geologist	0	1	0	0	1	0	1	0	0	1
Pedologist	0	0	0	0	0	0	0	0	0	0
Water Management Engineer	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation Engineer	0	0	0	0	0	0	0	0	0	0
Irrigation Technician	0	0	0	0	0	0	0	0	0	0
Building Engineer	3	0	0	0	3	2	0	0	0	2
Electrician	0	0	0	0	0	2	0	0	0	2
Draftman	4	0	0	0	4	1	0	0	0	1
Surveyor	13	0	0	0	13	5	0	0	0	5
Mechanical General Agriculture, Others	0	0	0	0	0	31	0	0	0	31
Sub-Total	42	23	2	0	67	57	14	1	0	72

**Table I.3.5 Technical Staff Composition of Irrigation Department
under WMERDB and OIDA by Specialty and Office (3/4)**

Speciality	Number of Staff									
	WMERDB, Irrigation Department (1998)					OIDA (2000)				
	Dip	BS	MS	PhD	Total	Dip	BS	MS	PhD	Total
South Branch (Bale Borena)										
Management	0	0	0	0	0	0	0	0	0	0
Agricultural Engineer	5	0	0	0	5	5	7	0	0	12
Irrigation Engineer	2	1	0	0	3	4	0	1	0	5
Civil Engineer	0	0	0	0	0	0	0	0	0	0
Agricultural Economist	0	0	0	0	0	0	3	0	0	3
Irrigation Agronomist	3	0	0	0	3	0	1	0	0	1
Hydraulic Engineer	4	2	0	0	6	0	0	0	0	0
Hydrologist	1	0	0	0	1	1	0	0	0	1
Sociologist	0	0	0	0	0	0	0	0	0	0
Geologist	0	1	0	0	1	0	0	0	0	0
Pedologist	0	0	0	0	0	0	0	0	0	0
Water Management Engineer	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation Engineer	0	0	0	0	0	0	0	0	0	0
Irrigation Technician	0	0	0	0	0	1	0	0	0	1
Building Engineer	1	0	0	0	1	1	0	0	0	1
Electrician	0	0	0	0	0	1	0	0	0	1
Draftman	0	0	0	0	0	1	0	0	0	1
Surveyor	0	0	0	0	0	1	0	0	0	1
Mechanical General Agriculture, Others	0	0	0	0	0	5	0	0	0	5
Sub-Total	16	4	0	0	20	20	11	1	0	32
Total Branches										
Management	0	0	0	0	0	2	0	0	0	2
Agricultural Engineer	26	23	3	0	52	30	31	1	0	62
Irrigation Engineer	12	5	4	0	21	11	6	1	0	18
Civil Engineer	1	2	0	0	3	0	0	0	0	0
Agricultural Economist	0	3	0	0	3	0	9	0	0	9
Irrigation Agronomist	14	3	3	0	20	3	5	1	0	9
Hydraulic Engineer	7	6	1	0	14	0	1	0	0	1
Hydrologist	4	0	0	0	4	4	0	0	0	4
Sociologist	0	2	0	0	2	0	0	0	0	0
Geologist	0	6	0	0	6	0	2	0	0	2
Pedologist	0	0	0	0	0	0	1	0	0	1
Water Management Engineer	0	0	0	0	0	1	0	0	0	1
Soil and Water Conservation Engineer	0	1	0	0	1	0	0	0	0	0
Irrigation Technician	2	0	0	0	2	1	0	0	0	1
Building Engineer	7	0	0	0	7	5	0	0	0	5
Electrician	0	0	0	0	0	5	0	0	0	5
Draftman	8	0	0	0	8	6	0	0	0	6
Surveyor	28	0	0	0	28	13	0	0	0	13
Mechanical General Agriculture, Others	0	0	0	0	0	48	0	0	0	48
Total Branches	109	51	11	0	171	129	55	3	0	187

**Table I.3.5 Technical Staff Composition of Irrigation Department
under WMERDB and OIDA by Specialty and Office (4/4)**

Speciality	Number of Staff									
	WMERDB, Irrigation Department (1998)					OIDA (2000)				
	Dip	BS	MS	PhD	Total	Dip	BS	MS	PhD	Total
Management	0	0	0	0	0	2	5	0	0	7
Agricultural Engineer	26	24	5	0	55	31	34	5	0	70
Irrigation Engineer	12	7	5	0	24	11	9	4	0	24
Civil Engineer	1	2	0	0	3	0	0	0	0	0
Agricultural Economist	0	3	0	0	3	0	13	2	0	15
Irrigation Agronomist	14	3	3	0	20	3	6	3	0	12
Hydraulic Engineer	7	9	2	0	18	0	3	2	0	5
Hydrologist	4	0	2	0	6	4	2	3	0	9
Sociologist	0	2	0	0	2	0	2	0	0	2
Geologist	0	6	0	0	6	0	3	0	0	3
Pedologist	0	0	0	0	0	0	1	0	0	1
Water Management Engineer	0	0	0	0	0	1	0	0	0	1
Soil and Water Conservation Engineer	0	1	2	0	3	0	0	0	0	0
Irrigation Technician	2	0	0	0	2	1	0	0	0	1
Building Engineer	7	0	0	0	7	5	0	0	0	5
Electrician	0	0	0	0	0	5	0	0	0	5
Draftman	9	0	0	0	9	8	0	0	0	8
Surveyor	30	0	0	0	30	16	0	0	0	16
Mechanical.General Agriculture, Others	0	0	0	0	0	48	0	0	0	48
Total	112	57	19	0	188	135	78	19	0	232

Table I.3.6 Roles and Functions of Units of OIDA, Present Condition

I. OIDA Board

1. Nomination of the General Manager of OIDA and present to executive Committee for an appointment,
2. Formulate and submit policies and laws of OIDA to the executive committee,
3. Submit to the executive committee the annual plan and budget of OIDA,
4. Issue directives regarding contract employees based on the recommendations made by the general manager,
5. Make a study to strengthen OIDA in manpower, property and management systems, and present it to the executive committee for decision,
6. Issue internal regulations of the Board and implement the same,
7. Discuss and provide solutions regarding displaced persons resulting for the construction of irrigation schemes and provide solutions for the problems related to water and land use,
8. Control the proper utilization of human, material and financial resources of OIDA,
9. Issue directive for the organization, powers, and duties of the committees to be established at different levels,
10. Issue directive or guide lines which are deemed necessary, and
11. Perform such other duties, which assist OIDA to attain its objectives.

II. HEAD OFFICE

1. Office of General Manager

1. Prepare the short term, medium and long term plans of the organization and submits to the board of directors for approval, and follows up the implementation of the plans.
 2. Prepares strategic plans, follows up the implementation of the existing rules and regulation so as to achieve the objectives of the organization.
 3. Prepare the annual budget for the organization and submits to board of directors and supervise the implementation of the budget approved by higher bodies.
 4. Sign different agreements with outside and domestic organizations.
 5. Employ the manpower/personnel staff / needed for the organization according to the program maintaining the rules and regulation of the civil service commission of the regional state.
 6. Design new methodologies of work and new best organization structure so then to promote productivity and effectiveness.
 7. Establish different permanent and ad-hoc committees such as discipline committee, etc.
 8. Coordinate, plan, organize, direct, control and integrate the all the activities of the organization.
 9. Participate on different meetings, congresses, and seminars that are concerned about irrigation development.
 10. Support and motivate staff members to make a development research and let the necessary facilities be fulfilled.
 11. Present annual and quarterly reports to the board of directors concerning.
 12. Open bank accounts for the organization of the budget of the organization.
-

2. Study and Design Department

(1) Study and Design Team

1. Conduct studies on irrigation projects and watershed of irrigation projects through topographic, hydrological, hydro geological investigations, and quantity and cost estimates.
2. Conduct environmental and socio-economic impact assessment studies with other units.
3. Undertake design of irrigation projects and structures.
4. Check and approve irrigation projects.
5. Establish and maintain a computerized database for all relevant data. Including unit costs and prices for construction of irrigation and drainage projects.
6. Plan, coordinate and supervise department activities.

(2) Construction Supervision Team

1. Supervise progress and quality of construction activities.
2. Review and approve construction plans, engineering estimates, technical reports and payment certificates for construction project to be made by contractors.
3. Review and approve completion of project works.
4. Check design of facility on the site.

3. Construction Department

(Responsible for the construction works to be made by OIDA)

(1) Construction Management Team

1. Prepare and submit annual plans and budgets and implement upon approval.
2. Assure the proper movement and maintenance of supplies and equipment to meet scheduled activities.
3. Supervise performance of engineering assignments, weirs and dam constructions, irrigation system and infrastructures.
4. Visit sites, prepare and schedule construction works, provide technical guidance and assistance to the various activities in the area of assist teams on difficult and complex problems.
5. Consult and confer with subordinates, and assist them in resolving difficulties in construction and management or unusual problems requiring engineering decisions.
6. Supervise and participate in appraising cost estimating and scheduling of each site.
7. Review progress reports, make adjustments in schedules as deemed necessary.
8. Confer with branch coordinator, teams and site crews on maintenance of schedules, work progress to evaluate adherence to schedules and estimates.
9. Formulate and recommend construction guideline criteria, standards policies, and procedures for construction works of irrigation and drainage facilities.
10. Implement the same up on approval.
11. Prepare formats for monitoring sites construction.
12. Prepare and submit periodical reports.

(2) Contract Administration Team

1. Evaluate studies conducted by the consultants.
 2. Administer construction contracts and ensure the proper implementation of contracts.
 3. Prepare relevant documentation and analyze for tender advertisement, service tenders, and prepare tender documents in cooperation with other units.
 4. Evaluate bidding and prepare contract documents.
 5. Prepare and submit periodical reports.
-

4. Irrigation Extension and Water Management Department

(1) Irrigation Extension and Water Management Team

1. Follow-up operation and maintenance, and water management works covering all small scale irrigation schemes..
2. Implement extension works including water management, irrigation farming, marketing products on modern and traditional irrigation schemes.
3. Monitor and evaluate works of the teams in the branch offices.
4. Prepare the guidelines, manual and training materials for the branch and district experts.
5. Prepare and submit periodical reports.

(2) Watershed Management Team

1. Follow-up watershed management works.
2. Study, design and implement soils and water conservation activities on catchment of irrigation projects.
3. Prepare the guidelines, manuals and training materials for the branch and district experts and DAs.
4. Prepare and submit periodical reports.

5. Community Participation Department

(1) Community Mobilization Team

1. Design methods, policies, and strategies for community participation management.
2. Prepare short term and long term plans concerning community participation.
3. Study and establish irrigation or water users associations, and provide support the community in setting up water committee.
4. Motivate the community to participate in designing irrigation projects and in studying projects and drainage systems.
5. Provide professional advice to the society /community/ so as to participate in planning irrigation schemes and watershed management and coordinate means and ways of other agencies' involvement.
6. Facilitate the hand over of the project to the water users associations or to the community.
7. Participate on training programs of the water user committee and integrate the program together with concerned parties, and provide advice in doing so.
8. Study and conduct social building process of completed irrigation projects.
9. Prepare and submit reports regarding community participation.
10. Plan and organize functions of the team.

(2) Training Team

1. Plan and organize the functions the team.
 2. Make a study on the training and education, and follow up the implementation of the plan.
 3. Prepare training manuals and follow up usage of them.
 4. Study the training to be given to the water user committees and social worker.
 5. Study and record the changes brought about by the community as a result of the training given.
 6. Set up criteria for training and facilitates conditions for workshop.
 7. Submit proposals on the source of fund, budget for training programs and education given to the community.
 8. Gather information from the using community and forward suggestion about the functions being performed in the future.
 9. Aware the community to get self sufficient in project administration and prepare further training programs to enhance the awareness of the community.
 10. Prepare and submit periodical reports
-

6. Planning and Programming Service

1. Prepare short term, medium and long-term plans of the organization.
2. Receive and control the annual and quarterly reports from branch offices and investigate the reports for proper implementation.
3. Design and implement cash release programs based on the Annual plan and the allocated budget.
4. Follow up the timely accomplishment of projects and the right application of budget according to the plans.
5. Evaluate planning, preparation of budget and submission of annual and quarter report.
6. Prepare discussion forums, meeting and workshop on planning, project evaluation, project follow-up and project study.
7. Facilitate and prepare the necessary conditions for new project studies.
8. Direct, integrate and control on going project for right application of budget and their performance according to existing policies and strategies.
9. Study the ways by which fund is obtained for the projects.
10. Direct studies and follows up the gathering of information about economics, farming and community.
11. Study, integrate and follow up the organization structure so as to fill the vacancy.
12. Design domestic and external training programs, and arrange for workshop and seminars by studying the education and skill required for the existing manpower.
13. Approve the right storage of the information gathered.
14. Prepare and study project statistics and provide information to the concerned parties.

7. Administration and Finance Service

1. Plan, organize and control the manpower, finance and properties of the organization through maintaining the existing administrative and finance policies, rules and regulations.
 2. Develop new methods and techniques of work by making the necessary inquiry.
 3. Design programs for hiring, transfer and promotion based on the civil service commission rules and regulation.
 4. Prepare internal and external training programs by studying the existing manpower.
 5. Identify vacant positions and prepare the way by which these positions are filled .by studying the organizational expansion.
 6. Control the update personnel records.
 7. Control the cash release of the organization and also approval cash release.
 8. Coordinate and control local and external purchase of material, observe whether purchasing rules are maintained or not.
 9. Follow up the proper maintenance of vehicles.
 10. Control the timely arrival of goods purchased, and obtain from donating countries.
 11. Prepare budget plans for the relevant units.
 12. Present Annual and Quarterly performance report indicating the shortcoming and the solutions.
 13. Control the release of cash at the right code and the right application of the fund.
 14. Approve the release of cash from the bank and control its right implementation.
 15. Prepare and submit periodical reports.
-

8. Audit Service

1. Evaluate the financial and administrative activities based on the existing rules and regulations.
2. Study the proper application and proper utilization of organizational budget /cash/ and property.
3. Control the proper keeping of organizational budget and protect the budget loss.
4. Follow up and control the performance of audit activities according to the plans.
5. Assist Branch office Auditors so as to promote and motivate them for proper control of governmental properties and follow up and control the functions of branch offices.
6. Submit performance report to the General Manager on the functions performed by the Audit service.
7. Evaluate the sufficiency of the performance the head office auditors and branch office auditors.
8. Provide information to external auditors.

9. Research and Laboratory Service

1. Conduct physical and chemical soil analysis.
 2. Conduct irrigation water quality test.
 3. Conduct plant analysis.
 4. Implement small-scale irrigation applied research activities.
 5. Prepare and submit periodical reports.
-

III. BRANCH OFFICE

1. Office of Branch Head

1. Prepare short, medium and long-term plans for branch offices and submit the plans for approval.
2. Coordinate, integrate and organize the functions of personnel administration.
3. Mobilize the budget and allocate to the organization based on the existing financial rules and regulations of government.
4. Control, evaluate and follow up the progress of projects, their financial and budgetary utilization, and right codification for release.
5. Prepare annual and quarterly report regarding the activities performed, the problems encountered, the remedies made, and the actions taken to solve the problems.
6. Follow up the timely release of the planned budget.
7. Employ and recruit new employees, promote the existing labor force under the existing policies, rules and regulations.
8. Study the existing manpower, prepare conducive conditions for training programs, fulfill the necessary precondition, and facilitate so as to improve the skills of the staff members.
9. Participate on different meeting, exchange information with out organizations, and sign agreements with out sides.
10. Pave the way for those employees engaged in research and provide support to motivate them submits the results of the research to higher echelon for approval.
11. Develop different methods that help to perform the functions of the organization at minim cost.
12. Establish and organize different permanent to Ael-hoc committees hence share the power with them for a smooth flow of organizational functions.
13. Provide the necessary information to the head office and other outsider who seek information on time.
14. Open a bank account to the branch office and mobilize the budget together with other concerned staff members.

2. Study and Design Team

1. Conduct hydrological, geotechnical, agronomic, socio-economic, and topographic surveys.
2. Conduct design and drawing works.
3. Estimate project costs and evaluate projects.
4. Prepare pre-feasibility and feasibility reports.
5. Prepare and submit periodical reports.

3. Construction Team

1. Prepare construction schedule.
 2. Control overall construction activities and schedule supply of construction materials.
 3. Monitor construction progress.
 4. Prepare and submit periodical reports.
-

4. Community Mobilization Team

1. Plan, organize and implement community participation activities.
2. Facilitate communities and technical staff for irrigation development.
3. Facilitate smooth cooperation of labor contribution form communities.

5. Extension and Water Management Team

1. Arrange training in irrigation water management.
2. Prepare the action plan and evaluate the work performance.
3. Coordinate and facilitate with Agricultural Bureau and other agencies.
4. Follow up the general activities of irrigation water management team.
5. Prepare irrigation water management study and budget.
6. Participate the workshop, seminars, symposium etc. on irrigation water management.
7. Give technical aid in the whole process of IWMWS from planning to implementation.

6. Planning and Programming Service

1. Prepare annual plan.
2. Implement project supervision and budget control.
3. Prepare and submit periodical reports.

7. Administration and Finance Service

1. Control recruitment, hiring, assignment, promotion, transfer and pension of officers.
2. Control the account and authorizing expenditures.
3. Manage purchases and effective utilization of resources.
4. Prepare and submit periodical reports.

8. Garage and Transportation Service

1. Maintain and repair machines.
 2. Conduct periodic inspection and prevention of machines.
 3. Arrange machines according to the work schedule.
 4. Coordinate and facilitate transport services.
 5. Prepare and submit periodical reports.
-