## SPECIAL ISSUE

# Socio-Economic Status of Parents and Children's Schooling in Gambella Region, South West Ethiopia

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#### Abstract

Children's schooling and educational outcomes are affected to varying degree by parents' socio-economic background. However, there was no comprehensive report on the same issue from Gambella Regional State, Southwest Ethiopia. The aim of this study was, therefore, to assess the extent to which socio-economic status of parents influence children's education in the study area. A cross-sectional study (survey) design was employed to collect pertinent data from the entire 73,076 households' in the region. Pretested and validated structured questionnaire was used for data collection. The sociodemographic data showed that: 50.18% of the total population was males; 21% of the households were headed by females; and about 50% of the population belonged to school age. Farming was the major means of livelihood in nearly more than 80% of the woredas. The regional level estimated average annual income per household was EthBirr 29.866 with very significant variation among woredas. About half of the populations in the region were found illiterate. Of the total 320,341(95.4%) respondents, 41.2% did not go to school at all, and on average, 11% were recorded as dropouts. The highest proportion of nonschool attendants (never gone to school) accounted for more than 50% in some woredas of the region. Among the factors that hinder schooling in the region were problem of awareness, low levels of income and household leadership burdens. To curb the existing problems, enhancing enrollment at all levels, maintaining the needy students within the system, awareness development work on the significances of education, enhancing the living conditions of the population through diverse development strategies are recommended.

Key words: Gambella, Universal Primary Education, MDG, Disability

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#### INTRODUCTION

Children's educational outcomes vary sharply with their parents' socio-economic background (Machin, 2009) as there is a strong correlation between family income and educational outcome (Lauer, 2003; Dustmann, 2004). Differences in outcomes with parental background emerge early at the pre-school level and are re-enforced in childhood and teenage years through to tertiary education. In a study conducted to assess the effect of aspects of family background, including such factors as family income and parental education, on the educational attainment of persons over a certain period showed that permanent income matters to a certain degree, and that family income when the child is 0-6 years old is an important explanatory variable for educational attainment later in a child's life (Aakvik et al., 2005). As stated in the same report, short-term credit constraints have only a small effect on educational attainment while long-term factors such as permanent family income and parental education are much more important for educational attainment. The number of siblings in the family as well as parental education and the mother's level of employment outside the home are among variables to be considered. It was recommended that public interventions to alleviate the effects of family background should thus be targeted at a child's early years, the shaping period for the cognitive and noncognitive skills important later in life (Aakvik et al., 2005).

The Ethiopian educational system has contributed positively to the overall students' enrollment and educational attainment at all levels. Education is for free at all preuniversity levels and it is only recently that the cost sharing scheme was introduced for first degree level trainings. Moreover, the dramatic expansion of universities and their even distribution across the country have positively facilitated the enrollment rates in all regions. Some of these patterns were the case in the Norwegian education system, too. For the most part, education in Norway is publicly financed (Raum et al., 2003). Excepting a few private colleges, there are no fees for students attending colleges and universities. Furthermore, the State Educational Loan Fund (SELF) provides grants and subsidized loans to pupils in upper secondary schools, and to university and college students. The contribution is meant to cover the costs of living during the educational years, the central objective being promotion of equal rights to education for all persons living in Norway (Raum et al., 2003).

In general, family background matters even in a country like Norway despite the fact that Norway has gone far in equalizing the opportunities for education both along geographical and socio-economic dimensions. However, family background matters primarily through parent's educational level, and not by income. Results of the study conducted by Ingrum (2006) have shown that low socio-economic status, learning disabilities, and most importantly the interaction between these two variables increase the likelihood of dropping out of students from schools facing these challenges.

Although the Gambella Regional State has committed itself to the provision of quality, relevant, accessible and equitable education for citizens, which is ultimately enhancing the realization of universal declarations and conventions such as attaining the Millennium Development Goals and Universal Primary Education in the year 2015, there was no well documented data targeting the socio-economic status of the population and its implication for the educational attainment for the successful achievement of the above declarations in

This study attempted to explore the extent to which socio-economic status of parents and children's schooling align in Gambella Regional State. The aim of this study was to assess the socio-economic status of parents and schooling system of children in the region.

#### **Objectives of the study:**

This study was designed to address the following objectives:

- 1. To assess the socio-economic status of households in Gambella Region
- 2. To determine the effect of discrepancies in socio-economic status of parents on schooling
- To identify the major demographic factors that hinder students' schooling
- To determine the levels of drops out at different education level;
- To determine the proportion of children with disabilities, types of disabilities and the status of school enrolment of these population at all levels of education
- To generate baseline data that could help the region for planning to achieve the Millennium Development Goal with respect to Universal Primary education by 2015.

#### Significances of the study

As the region has been working hard to achieve the Millimium Development Goals including educational goals in line with enrollment of all children of school age by the year 2015, assessment of the existing education status of the population and embarking on the gaps were priority areas. The results of this study are expected to be significant for the following areas.

- It will help the region to design the UPE plan and its implementation to enroll all school age children of the region timely.
- Based on output of this study, the regional educational bureau will spend on access to education through appropriate construction and improve the learning quality.
- It will also help the region at large and the educational bureau in particular to have baseline data so that it will establish its own data management system.
- It could also enable donors and NGOs to plan for area of intervention be it human capacity building or resource provision.
- Furthermore, the study output will assist as a baseline data for further study besides enriching the available literature in related field to be used by researchers, educators and readers.

#### Scope of the study

The study covered all the 13 districts/woredas and 73,076 households in Gambella Region. It focused on detailed documentation of the socio economic status of all households. Issues included in the survey were determination of the heads of each household, the educational status, sources of income, patterns of schooling both at primary and secondary schools. Furthermore, determining the levels of education attained the status of dropout from school and identification of factors contributing to not going to schools, dropouts and sustainable schooling were among the focus areas of this study.

#### MATERIALS AND METHODS

#### Study site and period



Figure 1: Map of the study site

The study was conducted in Gambella Regional State from November, 2009 - April, 2011. All districts/woredas and households in the region were included. Gambella Region is located in the western extreme of Ethiopia, with Gambella Town located 777km southwest of Addis Ababa. The region is strategically boardered with South Sudan in the west and southwest, South Nations and Nationalities Peoples Region(SNNPR) in the south east, and Oromia Region in the east and north east with some of its woredas having access to potential markets across then international boarder (Gambella Peoples' Regional State, Bureau of Finance and Economic Development, 2008). According to the 2007 census, the region has a total population of 306,916 (CSA, 2010) of which 229,038 live in rural areas and 48% were females. The region has a total surface area of about 34,068 square kilometer (Gambella Regional State, Bureau of Finance and Economic Development, 2008). The settlement pattern of the region is dispersedly populated, with a population density reaching as low as 7.7 persons per sq. km. The region has recorded a peak population growth rate of 4.1% per annum. Gambela Region is a home of five indigenous ethnic groups namely: Nuer, Agnuak, Mejengir, Opo and Komo. During the study period, the region had 13 woredas grouped into a total of three zones and one especial woreda (Gambella People's Regional Government Council, 2006, unpublished data). Gambella is relatively one of the emerging regions in the country. The economy is totally backward predominated by mixed farming among the Agnuak and Mejengir people and agro-pastoral among the Nuer people (Gambella People's Regional State, Bureau of Finance and Economic Development, 2008). It has poor transportation network among the woredas and telecommunication coverage is very low. Most of the potentially rich agricultural land is untapped since the farming practice is mostly monoculture, and as a result, the region is affected by recurring food shortage. The health, water, sanitation and hygiene (WASH) coverages are very low. Because the natural resources are untapped, the level of income per household is very low and the region's contribution to the national GDP is negligible. which in turn affects the size of the budget allocated to the region by the central government (CSA, 2010).

Annually, the region receives mean annual rainfall that varies from woreda to woreda which is 900-1500 mm in the lowland area and 1900-2100 mm in midland woreda such as Godere. The annual rainfall has uni-modal occurrence and erratic distribution. The main rainy season in the region is from mid May to October. In addition, the mean annul temperature varies from 17.3°C in the mountains to 28.3°C in the plains. The absolute air temperature reaches about 45 -47 °C in mid March (Gambella Regional State, Bureau of Finance and Economic Development, 2008).

#### Study design and study population

The study employed cross-sectional survey design mainly the quantitative approach. Accordingly, information pertinent to the research question: "Does the socio-economic status of parents or guardian affect the children's school enrollment in Gambella Region?" was collected through house-to-house surveys. The study covered the entire Gambella Regional State involving the then 13 woredas (currently re-organized into 14), 239 kebeles and a total of 73,076 households. Hence, all family members living in Gambella Regional State (n= 358,809) were included in the study. There was no any sampling here since the study was fully based on the total population of the region.

#### Data collection instruments and procedures

Data collection instruments were house to house and school survey questionnaires. Data were collected from all households and schools (both primary and secondary) in Gambella Region using pre-designed structured questionnaire implemented after validation and refinement. The major issues addressed in the questionnaire included information on the educational status of school-age children, disability status, age, sex, language, literacy and other socio-demographic variables of each household. Furthermore, the parents' income and major sources of the income were gathered. For the sake of data quality, only trained personnel's were involved in the data collection processes. Professional personnel were carefully selected and trained to collect these data in which the administration was supported and guided by the administration officers from regional to kebel level assigned in collaboration with higher officers of the region.

### **Data Analysis**

Data were encoded and analyzed for the most important educational parameters using EPI Info software (version 7) and SPSS software packages (version 16). The analysis was made using descriptive statistics to compare woredas and the overall pattern at regional level.

#### **Ethical issues**

The regional higher administrative and educational bureau officers were involved and responsible to mobilize this study in which the researchers of this study were acting as consultants representing Jimma University, the consultant institute.

#### **RESULTS**

### Socio-demographic characteristics of the study population

During the study period, there were a total of 73,076 households in the region found unevenly distributed over the then 13 woredas and one city administration (Gambella Town) with a total population of 358,809 individuals (Table 1). Woredas with the largest proportions of the total population in their decreasing order were Jikawo (15%) followed by Lare (14.1%), Godere (10.9%) and Gambella Town (10.6%). Overall, about 49.8% of the populations were females, while the remaining 51.2% were males, with an almost equal male-to-female ratio. The population density per kebele significantly varies from woreda to woreda as some of the woreda with higher numbers ( $\geq 20$ ) of kebele (such as Dima, Etang, and wantawar ) had the least population, while those with few kebele (5-10) had proportionally higher population (Table 1).

Table1: Population of Gambella Region by Woreda, Kebele and Household

			Population	n*				
Woreda/	No. of Kebele	No. of HH	Male		Female		Total	
Town			No	%	No	%	No.	%
Abobo	17	6416	15296	49.01	15913	50.99	31209	8.73
Akobo	21	4482	12481	51.59	11713	48.41	24194	6.77
Dima	20	2698	5267	50.20	5224	49.80	10491	2.93
Etang	21	4668	11199	48.56	11862	51.44	23061	6.45
Gambella Town	5	8282	19204	50.67	18699	49.33	37903	10.60
Gambella Zuria	14	2352	5009	46.76	5703	53.24	10712	3.00
Godare	14	9094	19720	50.45	19370	49.55	39090	10.93
Gog	11	3636	8029	44.93	9843	55.07	17872	5.00
Jikawo	36	8893	27710	50.62	27029	49.38	54739	15.31
Jor	14	2087	4560	45.33	5500	54.67	10060	2.81
Lare	27	9297	26278	52.47	23805	47.53	50083	14.01
Mengish	18	6841	12801	52.06	11786	47.94	24587	6.88
Wantwar	21	4330	11827	50.34	11669	49.66	23496	6.57
Total	239	73076	179381	50.18	178116	49.82	357497	100.00

Where: HH=Household

<sup>\*</sup>No sex reported for 1312 individuals => grand total population= 358,809

The percentage of female household leaders varied from woreda to woreda although male leaders dominated in most woredas. Accordingly, more than a quarter of the households was dominated by male heads in Mengish (86.62%), Godare (82.49%), Lare (80.81%), and Dima (80.39%) with relatively good numbers of female heads taking the households' leadership in Jor (42.48%), Gambella Zuria (32.61%), Etang (32.2%) and Abobo (30.83%) (Table 2). The average regional level household dominated by male heads accounted for 73.5% indicating that males' leadership positions were significantly higher than that of females in Gambella Region. This has its own implication to the economic power of households in female lead households and the supports to be made to students already enrolled or looking for possible enrollment in the future. As can be seen in the subsequent section, the income of households has relationship with leadership type, hence directly influencing schooling.

Table 2: Distribution of Heads of the Household by Sex in Gambella Regional State

	Total no. of HH*	Head of H	IH by Sex		Unidentified (no-response)			
Woreda/Town		Male		Female		_		
		No	%	No	%	No	%	
Abobo	6416	4292	66.9	1978	30.8	145	2.3	
Akobo	4482	3351	74.8	623	13.9	508	11.3	
Dima	2698	2169	80.4	445	16.5	84	3.1	
Etang	4668	2889	61.9	1503	32.2	275	5.9	
Gambella Town	8282	5878	71	2192	26.5	212	2.6	
Gambella Zuria	2352	1396	59.4	767	32.6	187	8	
Godare	9094	7502	82.5	1336	14.7	256	2.8	
Gog	3636	1805	49.6	1814	49.9	17	0.5	
Jikawo	8893	6941	78.1	1039	11.7	913	10.3	
Jor	2087	1073	51.4	887	42.5	128	6.1	
Lare	9297	7513	80.8	1390	15	394	4.2	
Mengish	6841	5925	86.6	838	12.2	77	1.1	
Wantwar	4330	2993	69.1	820	18.9	517	11.9	
Total	73,076	53727	73.5	15632	21.4	3713	5.1	

Where, HH = Household

The data in Table 3 shows that the highest average number of individuals living in a given household was found 8.1 (Jikawo) and the least was 3.6 (Mengish). The regional level average number of individuals per household was reported as 5.3, a value almost equivalent with the national average number of household (5). The highest range in number of family members per household was observed in Jikawo (1-32) while the smallest was recorded in Mengish (1-14). The number of individuals per household varied significantly within all woredas (% CV > 10%). The variability was more pronounced in some woredas including Gambella Town, Gambella Zuria, Godare, Gog and Jikawo (Table 3), scoring coefficient of variation above 50%. Having more than one partners by male household heads accounted for many individuals per house in some of the woredas such as Jikawo (Table 3).

Table 3: Average Number of Individuals Per Household in Woredas of Gambella Regional State

Woreda/Town	Numbe Househ	a %CV			
	Mean	St. Dev. Minimum		Maximum	
Abobo	4.9	2.4	1	18	- 48.98
Akobo	5.4	1.8	1	19	
Dima	3.9	1.9	1	18	33.33
Etang	4.9	2.4	1	20	48.72
Gambella town	5.3	3.8	1	31	48.98
Gambella zuria	4.6	2.7	1	21	71.7
Godare	5.6	3.3	1	23	58.7
Gog	4.9	2.8	1	20	58.93
Jikawo	8.1	4.2	1	32	57.14
Jor	4.8	2.5	1	17	51.85
Lare	5.4	2.2	1	21	52.08
Mengish	3.6	1.9	1	14	40.74
Wantwar	5.4	2.2	1	19	52.78
					40.74
Total	5.3	3.0	1	32	56.6

<sup>\*</sup>Family members of 27 households were not properly recorded, hence not considered for analysis

With regard to frequency distribution of school age population of the region, 14.3% (51,203), 24.6% (88,189), and 11.2% (39,913) were aged 3-6 years, 7-14 years, and 15-18 years, respectively (Fig. 2). Accordingly, a significant number of children were supposed to be in kindergarten by the time of this study and the number was the

highest in Jirawo (n=8,790) (Fig 2; Table 4). The huge number at KG age demands for serious planning and readiness to enroll first cycle primary schools during the 2011 to 2015 academic years.

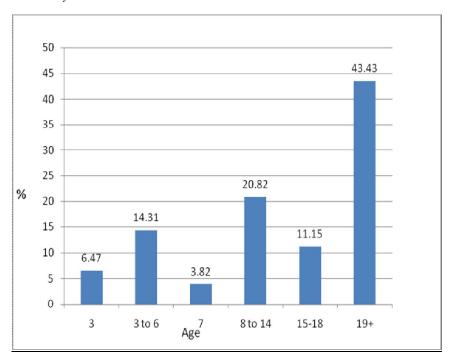


Figure 2: The school age distribution of population in Gambella Regional Sate

When these school age population distributions are considered at woreda level, the highest population, whose age category falls into Grade 1, was reported in Lare 2356 (17.2%) followed by Jikawo 2311 (16.9%) out of the total 13674 children aged 7 (Table 4). Likewise, KG level children were highly populated in woredas like Jikawo, 8790 (17.16%), Lare, 7877(15.38%), Abobo, 4720 (9.28%) and Godare, 4586 (8.95%) out of the total 51, 203 population of the category. In fact, there was almost no preparation to accommodate the KG level training as kindergarten schools were limited mainly to Gambella Town.

 Table 4: School Age Population by Woredas in Gambella Regional State

	Age (ye	ear)					
Woreda/Town	<3	3-6	7	8-14	15-18	19+	Total
Abobo	2404	4720	1232	6123	3487	13259	31225
Akobo	802	2966	1168	6380	3182	9838	24336
Dima	898	1489	350	1508	894	5348	10487
Etang	1732	3637	849	4968	2521	9391	23098
Gambella Town	2492	4126	1091	6703	5014	18468	37894
Gambella Zuria	829	1564	372	2225	1142	4640	10772
Godare	2564	4586	1242	7875	4128	18685	39080
Gog	1261	2730	685	3783	2122	7368	17949
Jikawo	3127	8790	2311	12397	6042	22177	54844
Jor	793	1711	451	2032	1076	4010	10073
Lare	2725	7877	2356	11653	5400	20043	50054
Mengish	1936	3110	742	3742	2268	12798	24596
Wantwar	1573	3897	825	5126	2637	9370	23428
Total	23136	51203	13674	74515	39913	155395	357836
Total (%)	6.47	14.31	3.82	20.82	11.15	43.43	100

#### **Income Status of the Population**

Concerning the source of income of the population, about 67% were dependent on farming, followed by government employee (15.5%), running of private business (7.7%) and dependence on aids (0.6%). The share of private organizations in creating job opportunities was about 2.1% of the total employment rate in the region (Table 5). In general, significantly high proportion of the population in Jikawo (92.1%), Lare (84.6%), Akobo (84.5%) and Godare (82.7%) are earning their livelihood from subsistent agriculture. In Gambella Town, however, most of the residents (43.1%) are government employees whereas about 2% were dependent on aids from the government and NGOs. In addition, the proportions of government employees were relatively high in Mengish (35.2%) and Gambella Zuria (20.5%). Accordingly, farming was the major means of livelihoods in most woredas of the region (Table 5).

There were significant variations in annual income within and among woredas of Gambella Region. As indicated in Table 6, woredas like Lare, Etang, Gambella Town, Akobo and Abobo reported their estimated average annual income of Birr 114,970, 49,898, 31,898, 24,803 and 21,299, respectively. Contrary to this, the estimated average annual household incomes of woredas such as Jor, Mengish, Godare, Gog and Dima were reported to be Birr 4753, 5686, 7131, 7932, and 8487, respectively (Table 6).

The regional level estimated average annual income per household was reported as Birr 29,866 with standard deviation of Birr 735,745. The contributing factor for such big variation among woredas could be the expansion of investment opportunities to the region although the distribution was not equal across the woredas. Thus, the report indicates the existence of big differences in people's incomes in the region. This in turn, could affect those with low average income as they would not manage to cover education cost for their children.

Table 5: Sources of Income of Households, Gambella Region

	Source of Inco	Source of Income													
Woreda/ Town	Government employment wage No (%)	Private employment wage No (%)	Running own business No (%)	Agriculture No (%)	Trade No (%)	Pension No (%)	Aid from NGO/ GO No (%)	Others No (%)							
Abobo	789 (12.5)	220 (3.5)	935 (14.8)	4170 (65.9)	133 (2.1)	20 (0.3)	32 (0.5)	30 (0.5)							
Akobo	319 (7.2)	50(1.1)	1994.5()	3739(84.5)	68(1.5)	1(0)	38(0.9)	13(0.3)							
Dima	147(5.5)	27(1)	492(18.4)	1267(47.5)	473(17.7)	0(0)	10(0.4)	251(9.4)							
Etang Gambella	791 (17.2)	69 (1.5)	549 (11.9)	3034 (65.9)	73 (1.6)	2 (0) 101	63 (1.4)	24 (0.5)							
Town Gambella	3465 (43.1)	708 (8.8)	1288 (16)	379 (4.7)	569 (7.1)	(1.3)	157 (2)	1372 (17.1)							
Zuria	479 (20.5)	10 (0.4)	58 (2.5)	1742 (74.6)	23 (1)	1(0)	10 (0.4)	11 (0.5)							
Godare	646 (7.1)	129 (1.4)	101 (1.1)	7494 (82.7)	364 (4)	24 (0.3)	5 (0.1)	300 (3.3)							
Gog	535 (15.1)	26 (0.7)	663 (18.7)	1873 (52.8)	330 (9.3)	4 (0.1)	47 (1.3)	71 (2)							
Jikawo	336 (3.8)	59 (0.7)	176 (2)	8112 (92.1)	102 (1.2)	4(0)	4 (0)	17 (0.2)							
Jor	211 (10.1)	6 (0.3)	141 (6.8)	1672 (80.3)	14 (0.7)	3 (0.1)	4 (0.2)	31 (1.5)							
Lare	721 (7.8)	35 (0.4)	209 (2.3)	7811 (84.6)	380 (4.1)	3 (0)	55 (0.6)	21 (0.2)							
Mengish	2389 (35.2)	53 (0.8)	33 (0.5)	4254 (62.6)	32 (0.5)	4 (0.1)	2 (0)	27 (0.4)							
Wantwar	354 (8.3)	142 (3.3)	717 (16.8)	2824 (66.1)	195 (4.6)	1 (0)	30 (0.7)	12 (0.3)							
Total	11182 (15.5)	1534 (2.1)	5561 (7.7)	48371 (6.7)	2756 (3.8)	168 (0.2)	457 (0.6)	2180 (3)							

Table 6: Household Annual Iincome Estimated in Birr, Woredas in Gambella Region

Trimmed mean <=100,000,000 Woreda/Town **Annual Income (Estimated in Birr)** %CV Standard Deviation Minimum Maximum Mean Abobo 2 21299 361,301 19,897,654 1696.3 Akobo 24803 52,621 2 1,670,000 212.16 Dima 8487 11,917 0 216,000 140.41 Etang 49898 523,588 2 19,000,000 1049.3 Gambella town 31898 422,458 1 25,538,000 1324.4 Gambella zuria 10237 152,362 7,000,200 1488.3 0 Godare 7131 58,426 1 5,000,000 819.32 Gog 7932 38,104 2 13,39,200 480.38 Jikawo 0 14293 367,661 25,673,220 2572.3 Jor 4 4753 7,621 100,000 160.34 Lare 1,928,417 1677.3 114970 4 88,000,000 Mengish 5686 11,412 1 450,000 200.7 Wantwar 12203 99,421 0 4,563,600 814.73 Total 0 29866 735,745 88,000,000 2463.5

### Educational status of the population and schooling

The literacy status of members of each household was identified based on whether the family members could read and write were reported from Gambella Town (73.8%), Akobo (58.3%) and Godare (57.8%) (Figure 3). On the other hand, individuals with no ability to read and write (more than 50%) were encountered in woredas such as Dima (59.6%), Wantwar (56%), Jikawo (55.9%), Jor (55.3%), Mengish (53.8%), Abobo (52.9%), Gog (52%), Lare (51.2%) and Etang (50.6%). In general, the regional level average literacy rate (individuals with ability to read and write) was found 50.54%. The result implies that Gambella Region went only half way to take the whole population out of illiteracy.

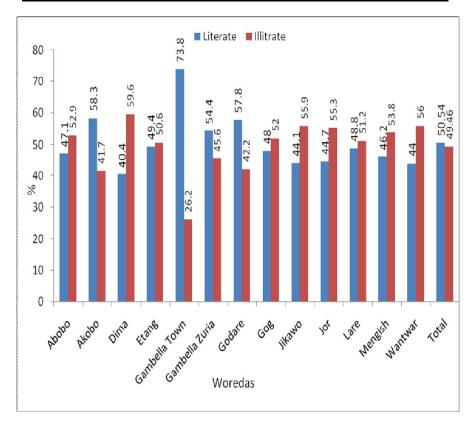


Figure 3: Frequency distribution of the literacy level in woredas of Gambella Region

As can be seen from Figure 4, concerning the levels of education, the highest percentage of zero level education (not educated) was reported in woredas such as Dima (55.1%), Wantwar (53.7%), and Jikawo (49.9%). On the other hand, the least (17.8%) zero level of education was reported in Gambella Town. The highest rate with ABE level of education was reported in Gambella Zuria (2.3%), and Etang and Gog (2.1% each). Furthermore, kindergarten level education (4%), GradeS 5-8 completes (25.7%), and Grades 9-10 completes (14%), were recorded from Gambella Town while the highest Grades 1-4 level completes (30.7%) was registered in Aakobo. Likewise, the highest percentage of Grades 11-12 (3.4%), diploma holders (6.3%) and college/ university graduates (8.6%) were reported in Gambella Town. Contrary to this, low records of Grades 11-12 (0.6%), diploma holders (1.0%) and college/university graduates (0.6%) were reported in Jor (Figure 4).

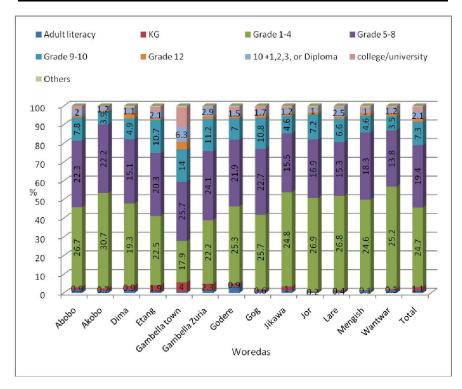


Figure 4: Frequency distribution of level of education of population of Gambella Region

The average regional level of education varied significantly for different education levels including zero level education (40.7%), ABE and KG (1.1%), Adult Literacy (0.8%), Grades 1-4 (24.7%), Grades 5-8 (19.4%), Grades 9-10 (7.3%), Grades 11-12 (1.0%), diploma/10+1 - 10+3(2.1%) and college/ university levels (1.6%) (Figure 4). Accordingly, at regional level, 44.1% of the population attended primary level education (Grades 1-8) attending either the first or second cycle.

Further analysis on the level of education completed by each respondent (data not given) indicated that 52.5% of the populations in Gambella Region completed formal schooling from Grades 1-12 and 1.2% completed ABE and KG levels. The highest proportion of those who completed Grades 1-12 education was reported from Gambella Town (63.8%) and the least from Dima (41.8%).

#### Class attendance and dropout status in regular schools

Class attendances and dropouts of regular students were also investigated through this survey in which respondents were required to identify and categorize their children into those who are regularly attending classes, dropouts, never joined schools at all and completed at certain grade levels. Accordingly, 320,341(95.4%) of the population responded to the inquiry and the result indicated that 41.2% of the children were not going to school at all and 11% were dropouts. As shown below (Figure 5), the proportion of students never going to schools were reported differently with the highest proportion being from woredas such as Wantwar (55.3%), Dima (54.7%), and Jikawo (50.5%).

The major reasons for never going to schools at regional level were variable and included working for family (27.29%), conflicts of different sort in the community (23.18%), school distance (14.98%) and lack of family interest (8.2%) (Table7). The regional level percentage of class attendance with the status of never going to school has been reported as 41.2% which is a huge number requiring intervention. On the contrary, relatively better percentages of class attendance during the study period were reported from woredas including Akobo (57.9%), Gambella Town (56.7%), Etang (49.3%) and Mengish (49%). The average regional class attendance status for those currently going to school was 42.9%.

With regard to dropout status from the schools, relatively high proportions were reported from Dima (24.1%), Godare (23.5%), and Mengish (22.9%) (Figure 5). The regional level average dropout rate was recorded as 11% which calls for intervention. Likewise, the highest percentages of former grades completed (currently not going to school) were recorded in woredas such as Gambella Town (11.9%), Gambella Zuria (8.7%) and Lare (8.3%) with regional level record of 4.9%. This implies the need for designing of mechanisms to enhance school attendance.

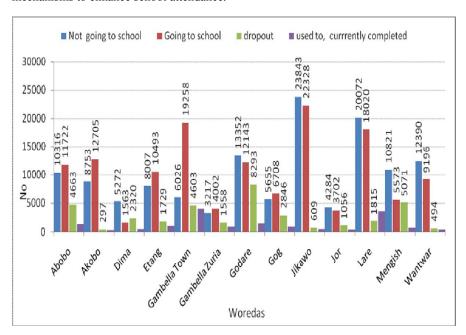


Figure 5. Class attendance patterns and its distribution among woredas, Gambella

Besides the reasons which accounted for never going to school (Table 7), the respondents also reported that the *need for family support, marriage cases and lack of guardians support* were among the reasons for the *dropouts* observed in the current study (Table 8). Accordingly, the challenges in relation to the need to support family were higher in some of the woredas accounting on average for more than a quarter of the cases in Godare and

Mengish (30.7% each), Abobo (28.8%), Gambella Town (28.5%), Gambella Zuria (28.4%) and Akobo (27%). Lack of family support appeared the least in two of the woredas, namely, Wantwar (6.7%) and Lare (5.9%). On the contrary, marriage related problems were reported higher in Lare (48.9%) and Wantwar (27.8%), while the same problem was moderately high in six of the woredas such as Abobo (20.1%), Etang (19.5%), Gambella Zuria (18.8%) and Gog (17.5%). A problem related to marriage seems the lowest in Gambella Town and Mengish (11.3%), Jikawo (9 %) and Akobo (8.8%). Lack of family support was another hindering factor for the recorded dropout rate in Lare (13%), Abobo and Dima (10.4% each) Gambella Town and Mengish (9.7% each) with response rate of 5% and lower for the other woredas. At regional level, the reasons for the dropout cases on the average were 29.2% for lack of family support, 14.1% due to marriage cases and 6.9% due to lack of guardians/family support (Table 8).

Woreda /Town	Reasons for no	easons for not going to school													
	Working for family No (%)	School distance No (%)	Lack of Family interest No (%)	Communal conflict No (%)	Lack of guardian support No (%)	un affording school fees No (%)	Unattracti ve School condition No (%)	Lack of interest No (%)	Instructio nal media problem No (%)	Others No (%)					
Abobo	2281 (23.7)	1524 (15.9)	1298 (13.5)	1299 (13.5)	540 (5.6)	454 (4.7)	536 (5.6)	430 (4.5)	75 (0.8)	1174 (12.2)					
Akobo	3644 (43.9)	735 (8.9)	1154 (13.9)	554 (6.7)	94 (1.1)	41 (0.5)	316 (3.8)	212 (2.6)	38 (0.5)	1504 (18.1)					
Dima	1311 (24)	1035 (18.9)	987 (18)	465 (8.5)	292 (5.3)	192 (3.5)	45 (0.8)	135 (2.5)	58 (1.1)	952 (17.4)					
Etang	1880 (25.2)	1076 (14.4)	1084 (14.5)	1026 (13.7)	251 (3.4)	304 (4.1)	703 (9.4)	366 (4.9)	117 (1.6)	663 (8.9)					
Gambella Town Gambella	948 (18.8)	593 (11.8)	846 (16.8)	312 (6.2)	385 (7.6)	574 (11.4)	92 (1.8)	151 (3)	24 (0.5)	1109 (22)					
Zuria	653 (24.5)	314 (11.8)	136 (5.1)	555 (20.9)	185 (7)	196 (7.4)	159 (6)	39 (1.5)	176 (6.6)	247 (9.3)					
Godare	2391 (17.7)	2622 (19.4)	1966 (14.5)	960 (7.1)	563 (4.2)	686 (5.1)	847 (6.3)	298 (2.2)	52 (0.4)	3143 (23.2)					
Gog	1341 (27.5)	908 (18.6)	369 (7.6)	258 (5.3)	300 (6.2)	322 (6.6)	251 (5.2)	167 (3.4)	70 (1.4)	887 (18.2)					
Jikawo	9686 (38.9)	6588 (26.5)	1573 (6.3)	1006 (4)	892 (3.6)	300 (1.2)	483 (1.9)	658 (2.6)	1371 (5.5)	2343 (9.4)					
Jor	735 (21.3)	514 (14.9)	240 (7)	65 (1.9)	62 (1.8)	45 (1.3)	121 (3.5)	57 (1.7)	13 (0.4)	1600 (46.3)					
Lare	9963 (48)	4146 (20)	948 (4.6)	626 (3)	509 (2.5)	691 (3.3)	510 (2.5)	503 (2.4)	469 (2.3)	2385(11.5)					
Mengish	2520 (24.5)	1132 (11)	1451 (14.1)	370 (3.6)	1057 (10.3)	975 (9.5)	203 (22)	184 (1.8)	81 (0.8)	2311 (22.5)					
Wantwar	4553 (46.6)	1805 (18.5)	546 (5.6)	652 (6.7)	425 (4.4)	552 (5.7)	67 (0.7)	120 (1.2)	298 (3.1)	743 (7.6)					
Regional level	41906 (27.3)	22992 (4.98)	12598 (8.2)	35590 (23.2)	5555 (3.62)	5332 (3.47)	4333 (2.82)	3320 (2.2)	2842 (1.8)	19061 (12.4					

Table-14: New Entrants, Promotes and Repeaters in Grade 1, 2010/11

Woreda/ Town		New Entry Sum	(%)		Promote	e		Repeater			Dro	pout
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Abobo	552	481 (46.6%)	1033	225	209	434	60	73	133	177	152	329
Akobo	2246	1536 (40.6%)	3782 (11.9%)	1218	710	1928	106	80	186	26	42	68
Dima	586	462 (43.0%)	1048	36	40	76	20	20	40	40	34	74
Etang	1583	1448 (47.8%)	3031	1104	1009	2113	110	170	280	257	223	480
Gambella Town	1564	1702 (52.0%)	3266 (10.2%)	1074	1156	2230	56	53	109	466	536	1002 (20.4%)
Gambella Zuria	440	496 (53.0%)	936	192	186	378	64	72	136	124	90	214
Godare	1188	1042 (46.7%)	2230	86	104	190	588	636	1224	518	416	934 (19%)
Gog	724	792 (52.2%)	1516	108	88	196	172	214	386	178	230	408
Jikawo	2438	1638 (40.2%)	4076 (12.8%)	1654	954	2608	218	146	364	140	84	224
Jor	418	445 (51.6%)	863	7	8	15	6	7	13	8	8	16
Lare	3162	2164 (40.6%)	5326 (16.7%)	1562	1034	2596	226	210	436	358	324	682 (13.9%)
Mengish	1060	1036 (49.4%)	2096	380	402	782	268	278	546	208	176	384
Wantwar	1684	994 (37.1%)	2678	918	576	1494	126	102	228	54	40	94
Total	17645	14236 (44.7%)	31881	8564	6476	15040	2020	2061	4081	2554	2355	4909

# The status of children enrollment in pre-schools (2010)

From the total 73,076 heads of the households in the region, 60523 (82.8%) responded to the question in relation to whether or not they sent their children to pre-schools in the previous academic year. Accordingly, only 14.8% sent their children to pre-schools at the regional level. Thus, about 85% of the region's households did not send their children to pre-schools. Especially, in selected woredas such as Jikao, Jor, Mengeshi, Wantawar, and Lare, more than 95% of the families did not send their children to pre-schools. Still, the majority of the remaining woredas (70% to 80%) did not have the chance to send their children to pre-schools. However, two of the woredas (Gog and Gambella Zuria) were

found relatively better in sending their children to pre-schools at the rate of 66.5% and 53%, respectively (Table 9).

Table 9: The Status of Sending Children to Pre-schools in Woredas of Gambella Region

Woreda/Town	Are ch	ildren s	-school?	No of Schools - /Kindergartens/				
	Yes		No					
	No	%	No	%	No			
Abobo	952	15.7	5125	84.3	4			
Akobo	132	3	4230	97	0			
Dima	592	25.6	1720	74.4	0			
Etang	800	19.2	3364	80.8	0			
Gambella Town	1693	32.6	3500	67.4	6			
Gambella Zuria	1074	53	953	67.4 47	3			
Godare	1428	26.2	4021	73.8	3			
Gog	1410	66.5	710	33.5	0			
Jikawo	272	3.2	8197	96.8	1			
Jor	2	0.1	2068	99.9	0			
Lare	376	4.9	7302	95.1	1			
Mengish	122	1.9	6348	98.1	0			
Wantwar	79	1.9	4053	98.1	0			
Total								
	8932	14.8	51591	85.2	18			

In response to why the families were not sending their children to pre-schools, many of the respondents (56.2%) attributed it to *lack of pre- schools* in their localities. Especially, woredas like Jor, Akobo, Jikawo and Mengesh supported this reason at the rate of 99.3%, 93.9%, 78.2% and 76.1%, respectively. These were the four woredas were the problem was highly magnificent. One third (6/18) of the total 18 pre-schools in the region were found in Gambella Town (Table 9). The next reasons for not sending children to pre-schools were distance from schools and economic problems at the rate of 16.8% and 4.8%, respectively, at the regional level. Here, woredas such as Etang (50.5%), Abobo (42.2%) and Gambella Zuria (43.5%) were the three woredas reporting distance as a major problem. In general, for most of the woredas, the survey implied that the major reason for not sending children to pre-schools were lack of accesss to pre-schools in their vicinity followed by distance problem.

As can be seen from Table 10, of the total 9057 disabilities recorded in the region, the highest numbers were observed in woredas such as Jikawo (14%), Godere (13.19%),

Abobo (11.09), and Gambella Town (10.84%). On the contrary, relatively fewer disabilities were recorded from Dima (1.37%), Gambella Zuria (3.66%) and Mengish (4.16%). The number (and %) disabilities reported at regional level was 9057 (2.6%) out of a total population of 358,809. This calls for paying serious attention by the regional government in order to facilitate the teaching learning processes and improve the life condition of these needy citizens.

Different types of disabilities existed in the community particularly among the school age population (less than 15 years old). Accordingly, six types of disability problems were identified: leg problems, hand problems, hand and leg, mental problems, hearing impairment and others. Accordingly, the highest rate was reported for those who had injuries both on hands and legs (25.2%), followed by hand problems only (24%), and leg problems only (12.8%) (Table 11).

 Table 10: Distribution of Disabilities among woredas of Gambella Region

Woreda	Sex No		Age category											
			<3	3-6	7	8-14	15- 18	>18	To		Grand Total	%		
Abobo	Male	No	8	42	10	86	58	323	527	5.8	101111	,,,		
	Female	No	15	31	8	61	50	313	478	5.3	1005	11.09		
Akobo	Male	No	3								1003	11.09		
	Female	No	5	24	9	61	38	155	290	3.2	400	5.40		
Dima	Male	No		14	4	58	19	108	208	2.29	498	5.49		
	Female	No	4	4	2	8	5	48	71	0.78	104	1.27		
Etang	Male	No	3	8	1	4	6	31	53	0.59	124	1.37		
	Female	No	6	10	6	59	30	165	276	3.05	500	6.40		
Gambella	Male	No	11	33	6	49	39	174	312	3.44	588	6.49		
Town	Female	No	20	29	16	78	69	318	530	5.85				
Gambella	Male	No	30	37	14	62	52	257	452	4.99	982	10.84		
Zuria	Female	No	4	8	6	25	24	109	176	1.94				
Godare	Male	No	7	14	5	18	13	99	156	1.72	332	3.66		
304410	Female	No	29	60	19	127	74	342	651	7.2				
Gog	Male	No	33	57	18	117	63	256	544	6	1195	13.19		
dog	Female	No	14	30	11	71	33	217	376	4.15				
Lilrania			12	26	12	54	32	245	381	4.21	757	8.36		
Jikawo	Male	No	12	49	20	148	88	372	689	7.6	1260	14.01		
Jor	Female Male	No No	17	35	15	108	57	348	580	6.4	1269	14.01		
	Female	No	9	21	5	50	16	156	257	2.83	500			
Lare	Male	No	5	15	7	29	13	194	263	2.9	520	5.73		
	Female	No	6	27	15	112	61	203	424	4.68				
Mengish	Male	No	10	25	17	66	47	153	318	3.51	742	8.19		
-	Female	No	14	15	6	29	17	144	225	2.48				
Wantwar	Male	No	8	13	1	29	14	88	153	1.68	378	4.16		
	Female	No	10 10	39 20	6 8	93 73	45 22	172	365	4.03	667	7 26		
	Total	No		29		73	22	160	302	3.33	_ 667	7.36		
		%	305	695	247	1675	985	5150	9057	100				
			3.4	7.67	2.7	18.49	10.9	56.9	100		9057	100		

Table11: Type of Disabilities Observed among Children in Gambella Region

Woreda/ Town	Disabled (	Children by	their Type ar	nd their nun	iber		Total	
1 own	Hand problem	Leg problem	Both hand and leg problems	Mental problem	Hearing impaired	Others, mainly sight problem	No.	%
Abobo	11	57	61	27	10	16	182	11.9
Akobo	17	32	32	2	17	73	173	11.3
Dima	1	0	0	0	0	0	1	
Etang	4	8	13	2	7	8	42	2.8
Gambell	11	22	25	7	9	31	105	6.9
a Town Gambell a Zuria	0	0	0	0	0	0		0
Godere	21	20	19	18	27	19	124	8.1
Gog	26	50	55	19	26	36	212	13.9
Jikawo	14	38	17	4	5	66	144	9.4
Jor	4	2	52	4	38	5	105	6.9
Lare	50	73	59	11	22	23	238	15.6
Mengesh i	2	2	14	4	5	5	32	2.1
Wantwar	35	63	38	3	15	14	168	11
Total: No	196	367	385	101	181	296	1526	100
%	12.8	24	25.2	6.6	11.9	19.4	100	

NB: Hand and leg associated disabilities in general accounted for 62%

# Enrollment status of disabled students at different levels of Education

Regarding disability issues in schools of Gambella Region, there were various problems among the woredas and across the levels of education. Accordingly, few disabled students were found enrolled in KGs in six of the woredas where females accounted for 0.12%. Woreda wise, the highest recorded disabilities were 404 (57.1%) in Akobo, 156 (24.2%) in Lare and 108 (15.3%) in Jikawo (Table 12). However, there was no disability reported from ABE centers except from Lare (11 individuals). On the other hand, in woredas like Etang, Abobo, Gog, Jor, Wantwar and Dima, there were no disabilities observed both in KG and ABE centers. The result calls for planning by the region in general and the specific schools in particular to take care of these special need groups during educational planning and facility allocation across the different woredas.

Table 12: Enrollment Pattern of Disabled Students in KG, ABE, Primary and Secondary Schools of Gambella Region

						Primary schools						Secondary schools					
	d ABE					Grade	1-4	Grade	5-8			Grade 9-10 Grade 11-12				Grade 9-12	_
KG				Total	%	boys	girls	boys	girls	Grand		boys		boys	girls	%	%
boys	girls	boys	Girls			22	10		1.2	<b>Total</b> 73	1.89					3	1.61
165	220			404	57					1913	49.6	•		•		6	1.64 3.28
103	239	•	•							28	0.73	2	4	•	•		
•	•			•	•					151	3.92	1	1	•	•	2	1.09
•	•		•	7	1	0,	.,			61	1.58	•	•		•	19	1.07
4	3			20	2.8	14	17	24	6	64	1.66	14	3	2		5	10.38
12	8					23	31	5	5			2	3				2.73
1	0			1	1	12	10	14	10			2	2	•	•		2.19
						43	39	33	20			1	2		•	3	1.64
108	0			108	15	119	111	15	11			1				1	0.54
				171	2.4	17	22	13	7					70	46		63.38
83	73	7	4	1/1	24	441	346	32	20			4	16				10.93
				•		40	33	10	5			3	1	•	•	4	2.18
						75	41	17	7								
373	323	7	4	707	10 0	2028	1484	202	139	3853	100	31	34	72	46	183	100
_	kG boys  165 4  12 1 108  83	boys         girls           165         239           .         .           .         .           4         3           12         8           1         0           108         0           83         73           .         .           .         .           .         .	kG         ABE           boys         girls         boys           165         239         .           .         .         .           4         3         .           12         8         .           1         0         .           108         0         .           83         73         7           .         .         .           .         .         .           .         .         .	KG         ABE           boys         girls         boys         Girls           165         239	KG         ABE           boys         Girls         Total           165         239	KG         ABE           boys         Girls         Total         %           165         239         .         .         404         57           .         .         .         .         .         .         .           .<	KG and ABE         Grade           KG         ABE         Total         %         boys           boys         Girls         Total         32           165         239         .         .         404         57         1152           .         .         .         .         .         .         57           1         .	KG and ABE         Grade 1-4           KG         ABE         Total         % boys         boys         girls           boys         girls         boys         Girls         Total         32         18           165         239         .         .         .         .         33         13           . <td< td=""><td>KG and ABE         Grade 1-4         Grade           KG         ABE         Total         boys         girls         boys         boys           165         239         .         .         404         57         1152         756         3           .         .         .         .         .         .         3         13         3           .         .         .         .         .         .         .         57         47         22           1         3         .</td><td>KG and ABE         Grade 1-4         Grade 5-8           kG         ABE         Total         %         boys         girls         boys         girls           boys         girls         boys         Girls         7otal         1         1         1         1           165         239         .         .         .         .         .         3         13         3         9           .         .         .         .         .         .         .         .         3         13         3         9           .         &lt;</td><td>KG and ABE         Grade 1-4         Grade 5-8           KG         ABE         Total         % boys         girls         boys         girls         boys         girls         poss         girls         boys         girls         poss         &lt;</td><td>KG and ABE         Total         Grade 1-4         Grade 5-8           kG         ABE         Total         %         boys         girls         boys         girls         Cgrand Total         %           boys         girls         boys         Grand Total         %         73         1.89           165         239         .         .         404         57         1152         756         3         2         1913         49.6           .         .         .         .         .         .         3         13         3         9         151         3.92           .<!--</td--><td>  Name</td><td>KG and ABE         Grade J-10         Moys         girls         Grade J-20         Moys         girls         Moys         girls         Grade J-20         Moys         girls         Moys         girls         Grade J-20         Moys         girls         Moys         Moys         girls         Moys         <th< td=""><td>  Note   Note  </td><td>KG and Jabe         Grade Jabe         Moys         girls         boys         girls         colspan="6"&gt;boys         girls         colspan="6"&gt;girls         girls         girls         girls         girls         girls         girls         girls         girls         <th< td=""><td>Note the content of the content of</td></th<></td></th<></td></td></td<>	KG and ABE         Grade 1-4         Grade           KG         ABE         Total         boys         girls         boys         boys           165         239         .         .         404         57         1152         756         3           .         .         .         .         .         .         3         13         3           .         .         .         .         .         .         .         57         47         22           1         3         .	KG and ABE         Grade 1-4         Grade 5-8           kG         ABE         Total         %         boys         girls         boys         girls           boys         girls         boys         Girls         7otal         1         1         1         1           165         239         .         .         .         .         .         3         13         3         9           .         .         .         .         .         .         .         .         3         13         3         9           .         <	KG and ABE         Grade 1-4         Grade 5-8           KG         ABE         Total         % boys         girls         boys         girls         boys         girls         poss         girls         boys         girls         poss         <	KG and ABE         Total         Grade 1-4         Grade 5-8           kG         ABE         Total         %         boys         girls         boys         girls         Cgrand Total         %           boys         girls         boys         Grand Total         %         73         1.89           165         239         .         .         404         57         1152         756         3         2         1913         49.6           .         .         .         .         .         .         3         13         3         9         151         3.92           . </td <td>  Name</td> <td>KG and ABE         Grade J-10         Moys         girls         Grade J-20         Moys         girls         Moys         girls         Grade J-20         Moys         girls         Moys         girls         Grade J-20         Moys         girls         Moys         Moys         girls         Moys         <th< td=""><td>  Note   Note  </td><td>KG and Jabe         Grade Jabe         Moys         girls         boys         girls         colspan="6"&gt;boys         girls         colspan="6"&gt;girls         girls         girls         girls         girls         girls         girls         girls         girls         <th< td=""><td>Note the content of the content of</td></th<></td></th<></td>	Name	KG and ABE         Grade J-10         Moys         girls         Grade J-20         Moys         girls         Moys         girls         Grade J-20         Moys         girls         Moys         girls         Grade J-20         Moys         girls         Moys         Moys         girls         Moys         Moys <th< td=""><td>  Note   Note  </td><td>KG and Jabe         Grade Jabe         Moys         girls         boys         girls         colspan="6"&gt;boys         girls         colspan="6"&gt;girls         girls         girls         girls         girls         girls         girls         girls         girls         <th< td=""><td>Note the content of the content of</td></th<></td></th<>	Note   Note	KG and Jabe         Grade Jabe         Moys         girls         boys         girls         colspan="6">boys         girls         colspan="6">girls         girls         girls         girls         girls         girls         girls         girls         girls <th< td=""><td>Note the content of the content of</td></th<>	Note the content of

Similarly, few disabled students were also found enrolled at primary levels out of which 56.38% were boys, and the highest enrollment was recorded in Akobo (about 50%) (Table 12).

In some of the first cycle primary schools of woredas such as Akobo, Lare and Jikawo, the disability cases were very serious, rated as 49.65%, 21.78%, 6.64%, respectively (Table 12). Although the problem was high for both boys and girls, still boys were by far reported to be more victimized. In all other woredas, there were students with disability cases although it was not as significant as the above three woredas. The fact that the disabled students were in the education system is by itself very encouraging but needs careful planning to sustain them in the system. Hence, the Regional Government, the Education Bureau, teachers and the community at large need to consider these student populations in all educational affairs.

As presented in Table 12, disability was not very serious in secondary schools of Gambella Region and there were minor differences among the woredas in their population of children with disability. However, in Jor, there was exceptionally the highest proportion of students with disability (63.39%) mainly in Grades 11-12 with higher proportion of boys (60.34%). On the other hand, woredas like Etang, Jikawo, Akobo, Abobo, Gambella Zuria and Lare reported zero rate of disability in their preparatory and very few in their general secondary schools. However, the number of disabilities distribution among woredas such as Etang, Jikawo, Akobo, Abobo, Gambella Zuria and Lare were 69, 145, 57, 108, 37, 108, respectively, showing that a significant number of disabled children were out of school. Thus, it is possible to conclude that many of the students with disability cases used to stop their education at primary first or second cycle. As a result, they could not appear in secondary schools as compared to the lower levels of education. Therefore, this indicates that there has to be action for maintaining these needy students within the education system. This requires critical attention during educational planning to address the problem. The reasons for low or no enrollment at higher educational levels could be accounted to the various socio-economic factors that have contributed to the high dropout and/ or of not attending school by the non-disabled children as stated earlier.

#### DISCUSSION

Socio-economic status (SES) is an economic and combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education and occupation. Accordingly, the family SES includes the household income, earners' education and occupation as well as combined income when their own attributes are assessed (National Center for Education Statistics, 2008). In fact, the socio-economic status can be measured in a number of different ways. Most commonly, it is measured by father's education, occupation and income (Memon, 2010). In the current study, source of income, educational status, household leadership and their association with schooling were among the major socio-economic issues addressed in details.

**Sources of income as factors influencing students' schooling:** Most of the potentially rich agricultural land of the region was untapped since the farming practice is mostly monoculture. As a result, the region is reported to be affected by recurring food shortage.

The health, water, sanitation and hygiene coverages were very low (CSA, 2010). Because the natural resources are untapped, the level of income per household was very low and the region's contribution to GDP is negligible, which in turn affects the size of the budget allocated to the region by the central government (CSA, 2010). Hence, the socioeconomic status of each household and the budget allocated to education collectively impact the overall students enrollments, sustainability and performance. The major sources of income for households of Gambella Region were agriculture (67%) followed by government employment (15.5%). The average annual income varied from Ethiopian Birr 49,898 (Etang) to 4753 (Jor), whereas the average regional annual income was Birr 29,866. Hence, the degree of familys' backing to their children's schooling varied significantly having its own challenge both economically as well as attitudinally for schooling. This needs a joint plan between government, non-government and parents to attain the UPE goals within the time set (2015). Since the source of income and its rate vary from woreda to woreda, the micro planning preparation of each woreda needs to take the variation into account.

The socio-economic status of a family has a significant influence even on students' preference of field of study at higher levels. A study conducted in Australia using an almost ten yeas' statistical profile of subject choice by senior high school students indicated that enrolments in science courses were strongly associated with a number of background factors including gender, peer influence, socio-economic status, parents' education levels and ethnic identity (Anonymous, 2014). These factors constitute external influence on students' enrollment decision at all levels (Abouchedid and Nasser, 2000 as cited in Anonymous, 2014). Aside the general socio-economic factors across most developing countries, disparity also exists in terms of provision of both material (educational infrastructure) and human educational resources and opportunities between rural and urban centers. This affects the quality of teaching and learning (Fredua-Kwarteng and Ahia, 2005), which could eventually affect students' interest in education especially science (as a practical subject) among students from rural schools in particular (Anonymous, 2014).

Educated mothers usually facilitate children's schooling and could contribute to better school enrollment and even enhance their performances (Jerrim, 2009; Jerrim and Micklewright, 2011). However, the effect could be the other way round especially when the household leadership is assumed by uneducated women, especially in the African context. In the current study, although many of the household leaderships in woredas of Gambella Region were male dominated, the fact that a significant proportion of the households were still female dominated needs serious considerations. The problem could be even worse in widowed women. A related study conducted in Bangladish to identify the effects of female-headship on children's outcomes, using both widowed and married women, indicated that children belonging to households headed by married women had stronger school attainments than children in other households, as children of widows were more likely to work outside the home (Joshi, 2004). Numerous studies indicated that women almost everywhere are disadvantaged relative to men in their access to assets,

credit, employment and education. Consequently, it is often suspected that female-headed households are poorer than male-headed households, and are less able to invest in the health and education of their children (World Bank, 2001, Joshi, 2004).

As clearly indicated by Ingrum (2006), low socio-economic status, learning disabilities and the interaction between these two variables could increase the likelihood of dropping out of schools for students who face these challenges. Furthermore, parental level of education, especially mother's educational attainment, is one of the major parameters that determine schooling and completion rates. Accordingly, people with less educational investment will not perform as well in the economy as those with more education. Additionally, assuming that parents with lower educational attainment place a lower value on education, their children will also place a lower value on education and are, therefore, more likely to drop out of schools than children of high school graduates (Ingrum, 2006),

As it was revealed in the result section, the rate of literacy and otherwise of the region were about fifty-fifty (50.4%). The highest literacy rate was found in Gambella Town (73.6%), where as the rest were around 50% or less. This calls for serious work on Alternative Basic Education (ABE) and KG rehabilitation and new set up/ establishment. Similarly, from 97.1% of the total population who responded regarding their level of education, 40.7% were found illiterate. This is also another indicator for the need to plan for increasing the literacy rate of the region considering the existing variability among the woredas. Furthermore, only 3.7% were at tertiary level (1.6% degree and 2.1% diploma) and 1% at preparatory level (ready to go to university), which implies that a lot needs to be done in the future to enhance the human power development plan. This was further supported by the result showing the level of those who already completed their education: only 0.5% at degree, 1.8% at diploma, 1.1% at certificate levels while the rest (52.5%) completed only Grades 1 to 12. Here, the region needs to design a variety of options including summer, extension, distance education programs and all other feasible ways to increase the number of qualified professionals that serve the community to their full capacity. Schools can empower children to become informed and self-reliant adults. Furthermore, schools can imbue children with the spirit of inquiry and reform, essential to the creation of enlightened leaders that can transform a country. Schools can be truly visionary, creating an environment where children can engage in the quest for knowledge. In the light of this general notion, the existing school enrollment and dropout rate of the already enrolled students besides significantly higher numbers of children who have never gone to school in Gambella region need serious effort on part of the region and the country at large for the attainment of Millennium Development Goal in 2015.

Coming to the population with respect to their school age level, those who were supposed to go to Grade 1 were 3.8% of which 56% were at school during the study period. This implies that a lot of work is awaiting to meet the target of UPE goals in 2015. In addition, early stimulation and readiness in pre-school education need to receive attention from the region. Accordingly, those at the ages of 3-6 accounting for 14.3% were also part of the coming five years plan to join primary schools for the next four years as of 2010. This should further be associated with the school survey data of the 1<sup>st</sup> grade enrolment. The school survey showed that the gross enrolment of 22098 (161.6%) in the 1<sup>st</sup> grade by the time of this study indicating a lot of over aged students in primary school particularly in

Grade 1. Therefore, the region needs to mobilize the woredas to design mechanisms like adult education, distance education, extension programs, and others to regulate and diversify educational provision for over aged citizens in order to use the regular schools for appropriate age groups.

The Education Sector Development Program III for 2005/2006 – 2010/2011, Ethiopia's national action plan on education, specifically discusses the adult and non-formal education program, and defines it to include a range of basic education and training components for out-of-school children and adults (MoE, 1998). Alternative Basic Education, one of non-formal education, is a type of school equivalency program for children of ages 7-14, in which learners cover the equivalent of the first four grades of primary school in just 3 years, and are then able to transition into the formal system. Alternative Basic Education is characterized by low-cost construction, community contribution to construction and school management, inclusion of disadvantaged ethnic groups, focus on gender and special needs groups, teaching in the local vernacular, selection of a facilitator from the local area, accelerated learning and active and learner-centered teaching methodologies and flexibility in delivery of education (Anis, 2007). It is now believed that by the use of Alternative Basic Education, it is possible to enhance students' completion rate through minimizing the number of dropouts by creating safe school conditions and improving educational achievements (World Bank, 1995, 2001).

The status of schooling: Of the total individuals who were supposed to be in school, 41.2% did not go to school at all, and 11% were dropouts implying the seriousness of the issue under study. Although the expected rate should have been close to 100%, the current rate (42.9%) of regular attendants is very discouraging in reference to the Millennium Development Goal accomplishment of UPE. This situation is more or less the same in most woredas with the rate of not going to school ranging from 30% to 50%. The case was even more serious due to high dropout rates in some woredas such as Dima (24.1%), Godere (23.5%) and Mengish (22.9%) which needs special attention. Among the major reasons for not going to schools were work load in support of families, distance from the school, and lack of family support. Therefore, these reasons are indicators to work on the micro plan at regional and woreda levels to enhance access to education. The marriage problem has to be solved delicately using prominent people, religious leaders and community administrators.

**Pre-school children:** Children of age below primary level are also among groups of concern. The survey revealed that 85.2% of the parents did not send their children to preschools whereby the majority of the woredas were also about this rate except the minimum recorded for Gambella Zuria (47%). The major reason given for not sending children to pre-schools were lack of school (56.2%), followed by distance from the school (16.8%), implying a sever problem of access to schools which should be solved by constructing new pre-schools. Since pre-schools seem scarce (only 18) in the region, the regional government, woreda and kebele administrators should pay due attention to mobilize the community and NGO's to expand pre-school education to enhance the attainment of UPE goals.

**Disability Issues:** It is not only the pre-school children that concerns educators but also the special need children who need attention to make them able to learn like any able children.

From the result, one can see that 9105 (2.6%) of the population were found with different types of disability status although it varied from woreda to woreda. Despite the presence of a significant number of children with disability at all school ages, the number reported from especially higher levels (preparatory and secondary schools) were almost nil. For example, the number of disabilities among woredas including Etang, Jikawo, Akobo, Abobo, Gambella Zuria and Lare were 69, 145, 57, 108, 37, 108, respectively, but no such cases were reported from high schools of these woredas showing that a significant number of disabled children are out of school. Thus, it is possible to conclude that many of the students with disability cases used to stop their education at primary first or second cycle. As a result, they could not appear in secondary schools as compared to the lower levels of education. Therefore, there has to be action for maintaining these needy students within the system. This requires critical attention during educational planning to curb the problem. The reasons for low or no enrollment at higher educational levels could be the various socio-economic factors that contributed to the high dropout and or not attending school by the non-disable children as stated earlier.

Thus, special attention should be given to school construction making them suitable to the disabled children to go to classes. Regular awareness creation programs should be organized and implemented within the community to convince them to send their disabled children to schools. On top of this, schools should get ready to admit and educate these needy children supporting them as per their special needs.

Regarding the enrollment of disabled students, the data revealed that many non-enrolled disabled children (n=1656) besides the unsuitable condition of schools for those who were already enrolled. Therefore, woredas and schools that have disabled students need to do their best to accommodate these special need groups in their micro-plan. Unless due attention is given to these children, the realization of educational MDG goals will be in question.

#### CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this study, it could be concluded that the socio-economic status of the study population has direct implication for the levels of community participation in education, be it school enrollment, levels of education attained and frequencies of drop outs from schools.

About a quarter of the households in the region were headed by females. In most cases, households headed by females are economically less favored and their backings to children schooling are low. This calls for capacitating of such wings of the population to enhance the family's participation in education.

Closer to 40% of the children in the region were within the school age when they are expected in kindergartens (14.3%) and first cycle primary education (24.6%). However, the very limited number or absence of KG schools in most of the woredas forced the children to stay out of the education system. The problem was even very severe in four of the woredas: Jikawo, Lare, Abobo and Godare. Thus, expansion of KGs and primary

schools need to be the focus of concerned bodies for successful attainment of the planned educational goals.

The major source of income in the region was the traditionally practiced subsistence farming. With dependence on subsistence farming that usually demands human labor, the possibility of sending a significant number of children to schools could be a challenge and the chance of attaining appropriate students enrollment at schools is less likely. Thus, working towards increment of productivity and introduction of efficient farming system along with attraction of big investments that could contribute to the betterment of the living conditions of the population could be an issue of prior concern to the concerned bodies.

About half of the population in the region were found illiterate. Although the highest literacy rates were reported from Gambella Town (73.8%), Akobo (58.3%) and Godare (57.8%), more than 50% illiteracy was recorded in other woredas of the region. Furthermore, about 41.2% of the population did not go to school at all and 11% were recorded as dropouts. The need for family support, marriage cases, and lack of guardians' support were among the reasons for the dropouts observed in the current study.

Therefore, awareness development on the significance of education, enhancing the living conditions of the population through diverse ways of development strategies by all stakeholders could improve the current high illiteracy, high dropout rates and low schooling.

From the results of the survey, it is possible to conclude that many of the students with disability problems were dropping out from their education after primary first or second cycle with even more dropouts as the level increases. This requires critical attention during educational planning to address the gap and curb the problem.

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#### REFERENCE

- Aakvik, A., Vaage, K., Salvanes, K. G. (2005). Educational Attainment and Family Background. *German Economic Review* 6: 377–394.
- Anis, K. (2007). Non-formal and basic education: Ethiopia country profile, Education for All Global Monitoring Report 2008. Available at <a href="http://unesdoc.unesco.org/images/">http://unesdoc.unesco.org/images/</a> 0015 /001555/15556e.pdf
- Anonymous (2014). The effect of socio-economic status on the enrollment of students into science classes in secondary schools in Nigeria. http://nairaproject.com/projects/213.html, retrived on 23 March, 2014.
- Dustmann, C. (2004), 'Parental Background, Primary to Secondary School Transitions, and Wages', Oxford Economic Papers 56: 209–230.
- Fredua-Kwarteng, Y. (2005). Ghana Flunks Math and Science: Analysis (2). available at: http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=75906
- Gambella Regional State Bureau of Finance and Economic Development (2008). Gambella People's Regional State Socio-Economic Survey Report; Addis Ababa (Unpublished).
- Ingrum, A. (2006). High School Dropout Determinants: The Effect of Socio-economic Status and Learning Disabilities" (2006). *Honors Projects*, Paper 24. Available at: http://digitalcommons.iwu.edu/econ honproj/24.
- Jerrim, J. (2009). Children's education and parents' socio-economic status: distinguishing the impact of mothers and fathers, University of Southampton, UK.
- Jerrim, J., and Micklewright, J. (2011). Children's cognitive ability and parents' education: distinguishing the impact of mothers and fathers, Institute of Education, University of London, UK. Available at: https://johnjerrim.files.wordpress.com/2013/07/jj\_jm\_madison\_jan\_26\_2011\_rsf.pdf
- Joshi, S. (2004). Female household-headship in rural Bangladesh: incidence, determinants and impact on children's schooling, Yale University, CENTER DISCUSSION PAPER NO. 894. Available at: <a href="http://www.econ.yale.edu/growth-pdf/cdp894.pdf">http://www.econ.yale.edu/growth-pdf/cdp894.pdf</a>.
- Lauer, C. (2003). Family Background, Cohort and Education: A French-German Comparison based on a Multivariate Ordered Probit Model of Educational Attainment, *Labour Economics*, 10: 231–251.
- Machin, S. (2009). Inequality and education. *In*: W. Salverda, B. Nolan, and T. Smeeding (eds.), *The Oxford Handbook of Economic Inequality*. Oxford: Oxford University Press.
- Memon, G.R., Muhammad Farooq Joubish and Muhammad Ashraf Khurram (2010). Impact of Parental Socio-Economic Status on Students' Educational Achievements at Secondary Schools of District of Malir, Karachi. *Middle-East Journal of Scientific Research* 6 (6): 678-687.

- MoE (Ministry of Education) (2005). Education Sector Development Program: Action Plan (ESDP III): Addis Ababa, Ethiopia.
- National Center for Educational Statistics (2008). Available at: http://nces.ed.gov/programs/coe/glossary/s.asp.
- Raum, O., Salvanes, K. G. and Rensen, E. Ø. S (2003). The Impact of a Primary School Reform on Educational Stratification: A Norwegian Study of Neighbour and School Mate Correlations, *Swedish Economic Policy Review*, 10:143–170.
- World Bank (1995). Priorities and Strategies for Education. Washington D.C.
   World Bank (2001). Engendering Development: Through Gender Equality in Rights, Resources, and Voice, Oxford University Press.