

## **Chapter 3**

### **Project Evaluation and Recommendations**

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### 3-1 Project Effect (including the Project (Phase I))

Present Status and Issues
TV and radio studios of the Educational Media Agency and Regional Educational Bureaus are not sufficiently equipped to produce educational programs to supplement the shortages of textbooks and teachers in the primary and secondary education sector.
Counter-measures of this Project
<p>Procurement of Educational Radio Program Production Equipment</p> <ul style="list-style-type: none"> <li>• EMA Radio Education Bureau Studio (improved under the Project (Phase I))</li> <li>• Gambella Regional Education Bureau Gambella Radio Studio (improved under the Project (Phase I))</li> <li>• Addis Ababa Education Bureau Addis Ababa Radio Studio</li> <li>• Afar Regional Education Bureau Semera Radio Studio</li> <li>• Oromia Regional Education Bureau (East Hararge Zone Education Desk) Harar in Oromia Radio Studio</li> <li>• Dire Dawa Regional Education Bureau Dire Dawa Radio Studio</li> <li>• SNNP Regional Education Bureau (Bench Maji Zone Education Desk) Mizan Teferi Radio Studio</li> <li>• Harari Regional Education Bureau Harar in Harari Radio Studio</li> </ul> <p>Procurement of Educational TV Program Production Equipment</p> <ul style="list-style-type: none"> <li>• EMA TV Studio (improved under the Project (Phase I))</li> <li>• Tigray Region Education Bureau Mekelle TV Studio</li> </ul>
Effects and Improvement to be Brought upon by the Project
<p>Improvement of the environment for producing educational programs at the central (EMA) and regional (Education Bureaus) levels is expected to bring about the following effects:</p> <ul style="list-style-type: none"> <li>• More educational programs will be produced in each region.</li> <li>• More subjects will be covered by TV and radio programs.</li> </ul> <p>The above will lead to:</p> <ul style="list-style-type: none"> <li>• Expanding access to education opportunities in rural areas, which will mitigate the disparity between urban and rural areas</li> <li>• Unification to education quality by producing and broadcasting standardized learning materials</li> <li>• Increase of certified teachers through enhanced teacher training</li> <li>• Increase of distance education students</li> <li>• Enhancement of adult literacy education</li> </ul>

#### 3-1-1 Direct Effects

##### (1) Areas to Benefit from the Project:

The entire land of Ethiopia

(2) Populations to Receive the Benefit

Project sites	No. of primary & secondary school students	No. of teachers	No. of general listeners	Total
EMA Radio/TV Studio (improved under the Project (Phase I))	764,649 (Secondary)	35,591	14,290	814,530
Gambella REB Gambella Radio Studio (improved under the Project (Phase I))	40,497 (Primary)	—	—	40,497
Addis Ababa REB Radio Studio	385,093 (Primary)	—	—	385,093
Afar REB Semera Radio Studio	29,124 (Primary)	—	—	29,124
Oromia REB (East Hararge Zone) Harar in Oromia Radio Studio	673,125 (Primary)	—	—	673,125
Dire Dawa REB Dire Dawa Radio Studio	37,796 (Primary)	—	—	37,796
SNNP REB Mizan Teferi Radio Studio	209,819 (Primary)	—	—	209,819
Harari REB Harar in Harari Radio Studio	27,271 (Primary)	—	—	27,271
Tigray REB Mekelle TV Studio	76,873 (Primary, 7th/8th grade)	—	—	76,873
Total no. of beneficiaries	2,244,247 <sup>*1</sup>	35,591	14,290	2,294,128

\*1 No. of primary school pupils : 1,479,598  
No. of secondary school students : 764,649

(3) Expected Benefits

1) Increase in Production of Educational Programs

Project sites	No. of programs before the Project	No. of programs after the Project	Target area
EMA Radio Studio (improved under the Project (Phase I))	460	990	Nationwide
EMA TV Studio (improved under the Project (Phase I))	80	120	Nationwide
Gambella REB Gambella Radio Studio (improved under the Project (Phase I))	168	336	Gambella Region
Addis Ababa REB Radio Studio	168	450	Addis Ababa Special District
Afar REB Semera Radio Studio	84	240	Afar Region
Oromia REB (East Hararge Zone) Harar in Oromia Radio Studio	None produced in the past	336	Oromia Region
Dire Dawa REB Dire Dawa Radio Studio	168	336	Dire Dawa Region
SNNP REB Mizan Teferi Radio Studio	None produced in the past	336	SNNP Region
Harari REB Harar in Harari Radio Studio	168	246	Harari Region
Tigray REB Mekelle TV Studio	None produced in the past	20	Tigray Region

## 2) Increase in the Number of Subjects Covered by Educational Programs

Project sites	No. of subjects before the Project	No. of subjects after the Project	Target area
EMA Radio Studio (improved under the Project (Phase I))	6	8	Nationwide
EMA TV Studio (improved under the Project (Phase I))	4	6	Nationwide
Gambella REB Gambella Radio Studio (improved under the Project (Phase I))	4	6	Gambella Region
Addis Ababa REB Radio Studio	4	5	Addis Ababa Special District
Afar REB Semera Radio Studio	1	7	Afar Region
Oromia REB (East Hararge Zone) Harar in Oromia Radio Studio	0	7	Oromia Region
Dire Dawa REB Dire Dawa Radio Studio	2	7	Dire Dawa Region
SNNP REB (Bench Maji Zone) Mizan Teferi Radio Studio	0	3	SNNP Region
Harari REB Harar in Harari Radio Studio	4	5	Harari Region
Tigray REB Mekelle TV Studio	0	4	Tigray Region

### 3-1-2 Indirect Effects

Expanding access to education opportunities for the people in rural area, which will mitigate the educational disparity between urban and rural areas

Unification to education quality by producing and broadcasting standardized learning materials

Increase of certified teachers through enhanced teacher training

Increase of distance education students

Enhancement of adult literacy education

### **3-2 Recommendations**

#### **(1) Dissemination of Radio and TV sets in Primary and Secondary Schools**

For the primary and secondary schools using radio and TV educational programs as part of teaching, it is vital to provide the schools with sufficient number of radio and TV sets.

According to “Distance Education, Utilization of Educational Radio and TV Program 2002”, out of 12,089 primary schools in total in Ethiopia, 9,792 schools corresponding to some 81 % of the total are currently taking advantage of radio educational programs, while the average number of radio sets owned remains only three (3) per school.

Each Regional Education Bureau has been distributing about 500 radio sets to primary schools in the region every year. However, diffusion of radio sets is insufficient at present. To make up for the lack of radio sets at primary schools, school teachers are using their own radio sets for the class.

Meanwhile, as regards TV sets, Ministry of Education has a plan in the ICT project assisted by the World Bank to distribute a TV set to every classroom of all secondary schools in the country. The ICT project gives priority to the secondary education through TV media but does not cover the distribution of radio set to primary schools.

The Regional Education Bureaus are required to make efforts to promote diffusion of radio sets aiming to distribute a radio set to every classroom of all primary schools like TV sets of secondary schools by increasing the necessary budget annually for purchasing of radio sets.

#### **(2) Technical Cooperation**

As almost all the equipment to be procured under the Project is digital equipment with advanced technology, the operation and maintenance training of digital equipment to the program production engineers of Regional Education Bureaus is essential.

Some program production engineers of Regional Education Bureaus have participated in a training of analog technologies, but nobody has taken a training course of digital technologies.

So far, the education and training for program production engineers of Regional Education Bureaus have been conducted in EMA, but those were all training only on the analog equipment EMA already owned not on digital equipment.

As regards method and place of operation and maintenance training on the digital equipment, it is usual to conduct the training in Japan. However, the radio program production system consists of many made-to-order equipment from different manufacturers to build up a specific system, so that it is not easy and economically not practical to prepare same equipment system in Japan only for training purpose. Moreover, the training in the NHK Training Center is conducted by using

very sophisticated equipment specially developed for broadcasters and its level of technology including training contents is considerably high compared to that of the Project.

Therefore, it cannot be expected that training in Japan produces fruitful effect even from the view point of cost and benefit.

The digital equipment installed in the EMA and Gambella radio studios under the Project (Phase I) are quite same in contents and scale as that planned to procure under the Project.

Therefore, it is considered the most practical to gather the engineers to the EMA radio studio and conduct the training on the equipment installed there under the Project (Phase I). It is recommended to conduct the digital training at EMA radio studio rather than Japan by dispatching Japanese experts.

### (3) Expansion of Radio Broadcast Network

Although twelve (12) medium-wave transmitting stations currently exist in total across the country to broadcast distance educational programs, the present number of transmitting stations is considered insufficient for the Regional Education Bureaus to ensure broadcast time for their produced programs and to fully achieve the desired educational effect. Therefore, expansion of transmitting stations is required. It is especially required to solve the disparity in the regions between owning transmitting stations and not owning. Oromia Region owns five (5) transmitting stations, while Dire Dawa, Harari, Gambella and Afar Regions own nothing.

It is an ideal improvement to solve the present situation of time-sharing a transmitting station by two to three Regional Education Bureaus by establishing at least one (1) transmitting station in each region so as to allow each Regional Education Bureau to broadcast produced programs in accordance with curriculum without time adjustment with other regions.

However, to install new medium-wave transmitting station, there are major hurdles not easy to solve: such as allocation of transmitting frequency, compliance with world standard of transmitting power output and after clearing the aforesaid hurdles, the license from ITU-R required. Therefore, it is recommended to expand service area not only depending on medium waves but also bringing other broadcast mediums into view such as FM and so on.

Besides, the twelve (12) medium-wave transmitting stations are allocated each with three (3) transmitting frequencies but currently they use only two (2) frequencies with two (2) transmitters. It is possible to increase broadcast time in full use of the allocated frequencies by adding a transmitter.

### (4) Digitalization of Existing Radio Stations

After completion of the Project, in total ten (10) program production studios (comprising eight

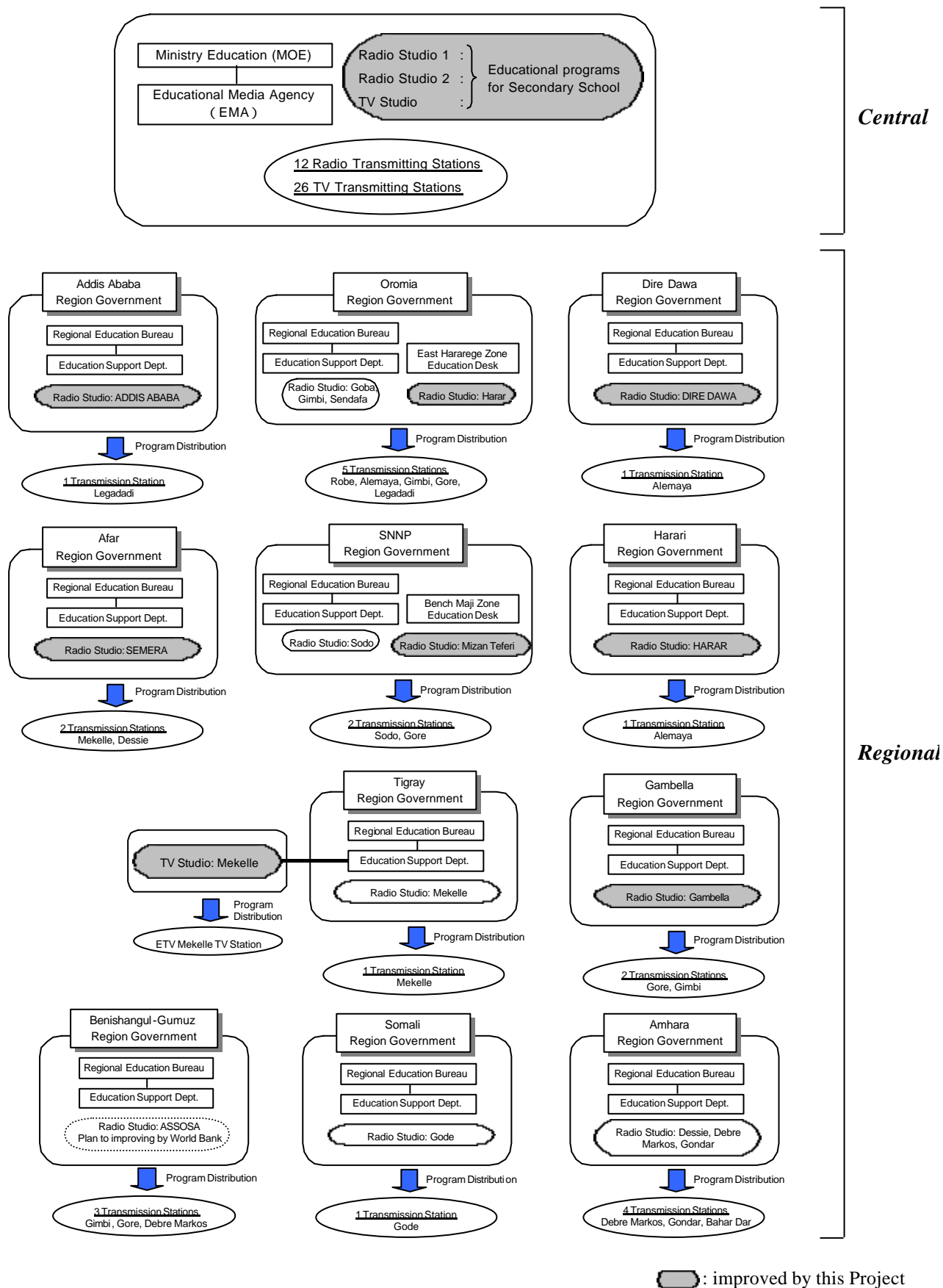
(8) radio and two (2) TV studios) including the studios improved in the Project (Phase I) will have been improved and program production will be able to perform in twenty (20) radio studios in ten (10) regions excepting the Assosa radio studio in Benishangul-Gumuz Region which is currently in the planning stage for improvement under the assistance of the World Bank. (Refer to Fig. 3-2-1 Distance Broadcasting Education System in Ethiopia (After Completion of the Project).)

In the ten (10) radio studios improved by the Regional Education Bureaus on their own account before implementation of the Project (Phase I), program production equipment all with analog equipment become superannuated.

Concerning these analog equipment, many components have been discontinued in manufacture and supply of spare parts is not guaranteed. Both 6mm recording tapes and open-reel tape recorders, which have been used in these ten (10) radio studios as a recording medium for program production, have been discontinued to produce and become unavailable to procure in market. For the time being, program production and broadcasting can be continued with 6mm tapes in stock, but anytime soon it should go into cessation of activities.

Following the digitalization trend, compact disc was adopted as a new recording media in the Project (Phase I) and CD players were procured and distributed to every transmitting stations to playback produced programs (recorded CDs).

It is recommended to renovate these studios with digital equipment as soon as possible to synchronize with the Project.



**Fig. 3-2-1 Distance Broadcasting Education System in Ethiopia  
(After Completion of the Project)**