Kenya

Kenya Broadcasting Corporation (KBC) Modernization Project

Report date: March 2001
Field survey: August 2000

1. Project Profile and Japan's ODA Loan

Site Map: Map of the Republic of Kenya

The KBC Ngong Transmission Station in suburban Nairobi

1.1. Background

The Kenyan government had improved broadcasting facilities in accordance with the long-term plan it developed in 1977. Since lower priority was given to broadcasting as compared to other areas of infrastructure, radio and TV broadcasts could only be received in limited areas and service coverage in terms of population was low at the time of appraisal. At the same time, the existing broadcasting facilities were becoming increasingly obsolete. As a result, the penetration ratio for radio and TV receivers was lower than average for African countries.

Table 1 Broadcasting Service Coverage

	Population	Land area
Medium-wave radio	60%	30%
TV	40%	8%
FM radio	25%	5%

Source: UNESCO statistics (1985)

Table 2 Penetration Ratio for Receivers

	Kenya	African countries
Radio	8.0%	13.5%
TV	0.5%	2.0%

Source: UNESCO statistics (1985)

In the 1980s, the demand for improvement and expansion of broadcasting services, particularly the nationwide medium-wave (MW) radio broadcasting network, grew among citizens. Against this backdrop, the Kenyan government developed the Long-term Broadcasting Development Plan at the advisory committee established at the direction of the President in October 1987 and positioned the present project as part of Stage I for the Plan. The Plan is outlined in Table 3.

Table 3 Outline of the Long-term Broadcasting Development Plan

Stage I (1988-1992)	Increasing MW radio broadcasting coverage to 99% at the national level
- Phase 1	Establishing five new broadcasting stations in the central region (population coverage: 80%; land area coverage: 65%)
- Phase 2	Modernizing the facilities of five existing broadcasting stations (population coverage: 90%; land area coverage: 75%)
- Phase 3	Establishing three new broadcasting stations in the northern region (population coverage: 99%; land area coverage: 99%)
Stage II (1990-1992)	Establishing a new program production center in Nairobi
Stage III (1993-1997)	Increasing Channel 1 TV broadcasting coverage to 99% at the national level
Stage IV (1998-2000)	Improving and expanding Channel 2 TV and FM broadcasting
Stage V (2001-)	Achieving nationwide coverage of Channel 2 TV and FM broadcasting, etc.

Source: JBIC materials
Note: Shaded areas indicate the portion of the Plan that was covered by the project.

1.2. Objectives

The objective of the project was to improve and expand the MW radio broadcasting network in accordance with the Long-term Broadcasting Development Plan, thus providing universal access to radio broadcasting services in Kenya and contributing to the improvement of the social infrastructure.

1.3. Project Scope

The ODA loan covered all project costs, including funds for constructing MW broadcasting facilities, those for procuring necessary materials/equipment and services, and costs for employing consultants. The loan agreement was executed in June 1989. Specifically, the project consisted of (1) establishing new transmission stations in five cities in central Kenya (Kitale, Marsabit, Maralal, Wajir and Malindi) to install MW broadcasting facilities; (2) modernizing obsolete facilities of existing transmission stations for MW broadcasting in five cities in southern Kenya (Garissa, Nyamnia, Ngong (Nairobi), Voi and Marania); (3) supplying necessary spare parts to the ten MW broadcasting facilities mentioned above; (4) providing and installing training equipment; and (5) providing training and operation/maintenance services. The project targeted the simultaneous implementation of Phases 1 and 2, the sections of Stage I (Phase 1-3: 1998-1992) mentioned above, that were more urgently needed.

1.4. Borrower/Executing Agency

Kenya Broadcasting Corporation (KBC)/KBC (Guarantee by the government of Kenya)

1.5. Outline of Loan Agreement

Loan amount/Loan disbursed amount	¥16.198 billion/¥15.442 billion
Exchange of notes/Loan agreement	April 1989/June 1989
Terms and conditions	Interest rate: 2.5%, Repayment period (grace period): 30 years (10 years), Partially untied
Final disbursement date	August 1994

2. Results and Evaluation

2.1. Relevance

The objective of the project was to improve and expand the MW radio broadcasting network in accordance with the government's Long-term Broadcasting Development Plan with the aim of providing universal access to radio broadcasting services. The Kenyan government assumed that it would be able to obtain financial cooperation from overseas donors, including ODA loans from Japan, to fund the implementation of its Plan. Since the completion of the project, however, the government has not been able to obtain either an ODA loan from Japan or financial cooperation from other overseas donors. Furthermore, as major donors have frozen their loans to Kenya since 1997, plans for Phase III and thereafter continue to be on hold.

KBC started to adopt a self-supporting accounting system after it became a public corporation in 1992 and is required to raise development funds independently. In addition, since the government's financial difficulties mean that is unlikely to extend financial support to KBC, it is feared that KBC may take considerable time and trouble to advance Phase III and thereafter of its Plan. As described above, the implementation of the Plan has been substantially delayed as compared to the initial predictions due to changes in the environment that surrounds the government and KBC. The project, however, targeted the implementation of Phases 1 and 2, the sections of the Plan that were more urgently needed, and is considered relevant irrespective of the implementation status of subsequent portions of the Plan.

2.2. Efficiency

(2.2.1.) Implementation Schedule

Plans called for the implementation schedule to span 38 months from January 1989, when the loan agreement was scheduled for signing, to March 1992, but took 38 months from June 1989, when the loan agreement was actually executed, to August 1992. Although the completion of the project was delayed by about five months, the length of the implementation period was virtually as planned.

(2.2.2.) Project Cost

The total project cost was ¥15.442 billion as compared to the ¥16.198 billion initially estimated. The project cost was within the planned cost range.

2.3. Effectiveness

(2.3.1.) Effects on the Improvement and Expansion of the MW Radio Broadcasting Network

The objective of the project was to improve and expand the MW radio broadcasting network, thereby providing universal access to radio broadcasting services. A comparison of the initial plans and actual results for the project in terms of

broadcasting service coverage reveals that after project completion, 95% of the population was covered as against the initially planned figure of 90%, and that land coverage was 90% as against the initially planned figure of 75%. Thus initial objectives were fully attained.

Table 4 Comparison of Broadcasting Service Coverage

(Unit: %)

Service coverage		1992 (Project completion year)	1993 (2nd year)	1994 (3rd year)	1995 (4th year)	1996 (5th year)	1997 (6th year)	1998 (7th year)	1999 (8th year)	2000 (9th year)
Popula-tion	Planned	90	90	90	90	90	90	90	90	90
	Actual	95	95	95	95	95	95	95	95	95
Land area	Planned	75	75	75	75	75	75	75	75	75
	Actual	90	90	90	90	90	90	90	90	90

Source: Replies to KBC questionnaires

(2.3.2.) Effects on Improvements in the Reliability of Transmission Facilities

In the pre-project period, KBC's MW radio transmission stations had no backup systems. Therefore, suspensions in services were inevitable when accidents or problems occurred, and extended suspensions in broadcasts were frequent. The project, however, enabled KBC to increase the reliability of its transmission facilities and provide broadcasting services in a stable manner.

(2.3.3.) Status of facility operation

A look at the status of operation for ten transmission facilities in 2000 indicates that all the facilities except the Ngong transmission station, which mainly covers the Nairobi area, were operating at less than half their full capacity. The major reason for this is that the transmission facilities had to set electric wave output low to compensate for serious shortages of electric supply and soaring electricity charges in Kenya. Because each transmission station had originally secured a sufficient service area, it is estimated that this problem did not result in reduced service coverage. Under the project, part of the design was reconsidered and other measures were taken by, for example, replacing solid-state type transmitters with vacuum-tube type ones, but this did not alter the capacity of transmission facilities.

2.4. Impact

(2.4.1.) Impact on Local Communities

The project has boosted the population and land area coverage of MW radio broadcasting services to 95% and 90%, respectively. This has enabled greater access to various kinds of radio-based information (in English and Swahili), including health and sanitation campaigns, social education programs and improved agricultural methods. Such improved access contributes to the enrichment of the welfare and livelihood of civil society and the revitalization of economic activity.

(2.4.2.) Impact on KBC's Income

Income from radio advertising is on the steady increase. Meanwhile, income from licensing continued to decline after peaking in 1997. The project called for KBC to collect fees for radio broadcasting service from the audience but such plans were not realized. It is difficult to establish a clear correlation between project contributions and KBC's income, though expanded service area and audience increases generally tend to lead to increased advertising income.

Table 5: Income from Advertising and Licensing

(Unit: One million Kenya shillings)

	1994	1995	1996	1997	1998	1999	2000
Radio advertising	218.7	314.7	290.0	326.9	332.0	426.0	369.8
Licensing	64.2	101.7	112.8	133.0	103.8	97.1	81.8

Source: KBC annual reports

(2.4.3.) Technological Impact

Ten KBC engineers received Japan-based training from project contractors on the introduction of new technology, and on project administration, operation and maintenance methods. Upon returning to Kenya, the engineers were appointed as directors of transmission stations and are currently engaged in the administration, operation and maintenance of the facilities while providing technical guidance to other KBC engineers. Currently, there are no particular technological problems with transmission facility operations. Thus the project achieved smooth technology transfer.

(2.4.4.) Impact on the Environment and Society

Evaluation team visited the newly established transmission station at Malindi. The station was newly built on a tract of land cut from the Malindi hills. It is remote from residential areas and due to the nature of its functions emits few pollutants or noise. So there has been no particular negative impact on society or the environment.

2.5. Sustainability

KBC is a state-owned organization and is the largest public broadcasting medium in eastern Africa. Its network covers the whole country, and currently over 95% of the population is covered by MW radio broadcasts, over 50% has access to FM broadcasting and over 70% can access TV programs. KBC's radio division manages twelve MW transmission stations, two short-wave transmission stations and eight FM transmission stations nationwide, and six technical managers from the head office conduct area-based monitoring of 22 radio broadcasting facilities across the nation. Engineers inspect and maintain all broadcasting materials and equipment

on a regular basis and receive assistance from head office as necessary. Meanwhile, the six technical managers receive regular reports from the transmission stations in their areas and contact the stations at least twice a week to ascertain the current status of operations. In addition, they visit the transmission stations at least twice a year to personally guide and supervise stationed personnel. In an emergency, they will rush to the site to provide necessary assistance. There is no particular problem with KBC's current administration, operation and maintenance system or its technological level. In terms of sustainability, however, KBC faces several problems as described below.

(2.5.1.) Financial Structure

KBC adopted a self-supporting accounting system when it was reorganized into a public corporation in 1992 and became unable to receive government subsidies. As a result, major income sources are currently advertising and licensing[1]. The percentages of radio advertising, TV advertising and licensing to total income in fiscal 1999/2000 were approximately 50%, 30% and 10%, respectively. Since it became a public corporation, KBC has seen its operating expenditure grow year on year with expansions in its TV and radio broadcasting network. Meanwhile, operating income has been stagnant because of decreased income from licensing[2] and reduced advertising income due to intensifying market competition following the deregulation of the broadcasting sector and new entry by commercial broadcasting stations, and other factors. Furthermore, the recent deterioration of the Kenyan economy has caused corporate activity to stagnate, which has had a negative impact on KBC's advertising income. For this reason, the gap between income and expenditure has not been filled, and as accumulated losses continue to increase, KBC's debts have exceeded its assets since fiscal 1993/1994.

As part of its efforts to improve the balance between income and expenditure, KBC has streamlined its organization by reducing its employees from 2,600 at the time of appraisal to the current 1,400. Although this improved organizational efficiency, KBC simultaneously suffered losses in terms of human resources because well-trained personnel and several leading managers left the organization. Conversely, however, the percentage of personnel expenses to total costs gradually increased, suggesting that the streamlining of the organization has contributed little to corporate financial position. The percentage of financial expenditure to total

[1] Kenyan law stipulates that a license fee shall be paid when a TV or radio receiver is purchased (a one-off payment). KBC is permitted to use income thus obtained as a revenue source on condition that it does not collect receiving fees from the audience.

[2] Essentially, as the broadcasting network expands and the population grows, it is expected that sales of radios and TVs will increase and that license fees will also increase proportionately. In reality, however, many commercial transactions do not follow legal procedures as exemplified by transactions that do not go through shops or dealers (there are several cases in which customers are not requested to pay the license fee), imports are up and an increasing number of forged licenses are being issued. Therefore, there is a large gap between the number of licenses issued and that of TVs and radios sold.

costs is also high, at approximately 25-40%, though varying from year to year, and this has become a major obstacle to achieving the financial health of the organization.

In terms of operating income, it is necessary to increase advertising income, which accounts for 80% of total operating income, but due to economic stagnation and intensifying market competition in the broadcasting industry, KBC cannot expect to see substantial growth in income for some time. KBC is seeking to make drastic structural reforms to its income system by adopting a new annual license renewal system and shifting to a new system of collecting fees for broadcasting services from the audience to replace the current system in which a license fee is collected only when a receiver is purchased for subscription. This has not yet been realized, however, because KBC has not been able to obtain approval for the scheme from the government. KBC is following two corporate strategies: providing public services through broadcasting operations and pursuing profitability as a self-funding organization. It is no easy task, however, for KBC to reconstruct its financial structure under the current operation system as it is unable to receive financial support from the government and is experiencing difficulties in strengthening its income foundation.

(2.5.2.) Insufficient Administration, Operation and Maintenance Budgets and Delays in Spare Parts Procurement Procedures

KBC admits that due to recent budget cuts, it has become difficult to secure a sufficient budget for administration, operation and maintenance and that this has hindered its operations.

Table 6 Gap between Requested/Approved Budgets for Administration, Operation and Maintenance

(Unit: Kenya shillings)

	1996	1997	1998	1999
Approved amount (Approved amount/Requested amount)	134,415,960 (78.4%)	94,337,315 (11.3%)	80,797,109 (10.1%)	73,031,122 (9.1%)
Requested amount	171,440,000	835,733,232	803,903,680	800,406,400

Source: Replies to KBC questionnaires

In addition, KBC states that complicated approval procedures at head office cause delays in the procedures for procuring spare parts from overseas. This makes it difficult to replace old spare parts with new ones in a timely fashion. For this reason, the inventories of many spare parts are currently in short supply, and this is highly likely to hinder the stable provision of services.

(2.5.3.) Use Status for Training Materials and Equipment and the Need for Improvement

Plans called for training materials and equipment procured under the project to be used for the technical training of KBC personnel. Due to budget shortages at KBC, however, training programs have not yet been implemented. In order to ensure effective utilization of the procured materials and equipment, it is necessary to strengthen budgets for the Langata Training Maintenance Center and improve its functions.

(2.5.4.) Salt Damage to Malindi Transmission Station

KBC's Malindi transmission station, one of the stations covered by the project, has sustained damaged due to the briny air from the adjacent salt plant. Broadcasting equipment as well as the structure of facilities has been heavily eroded and deteriorated, causing problems such as reduced output. Although KBC are taking measures to prevent erosion and deterioration, the problem has not been radically resolved.

(2.5.5.) Electric Supply Shortages in Kenya

In addition to the above-mentioned problem peculiar to KBC, electric supply has deteriorated in Kenya in recent years (such as power breakdown due to insufficient electric supply and voltage adjustment failures), posing a serious problem for industry as a whole, and has had adverse effects on the stable operation of transmission stations built under the project. For example, the Ngong the transmission station experiences scheduled blackouts for about eleven hours once every two days on average. Also, voltage is unstable, frequently fluctuating between 370 kV and 450 kV, causing major damage to broadcasting equipment, incurring problems and reducing the useful life of such equipment.

In addressing these problems concerning the sustainability of the project, it is necessary for KBC to work continuously to further increase advertising and licensing incomes. In the medium and long term, it is necessary for KBC to promote institutional and structural reforms, including examining the potential for privatization.

Comparison of Original and Actual Results

Item	Plan	Results
1. Project scope	(1) Construction of 5 new MW broadcasting facilities (Kitale, Marsabit, Maralal, Wajir and Malindi) (2) Modernizing 5 MW broadcasting facilitites (Garissa, Nyamnia, Ngong (Nairobi), Voi and Marania) (3) Provision of broadcasting equipment (4) Provision of training materials and equipment (Langata Training Maintenance Center) (5) A set of spare parts (6) Consulting services: 155 M/M	(1) Part of the standards for MW broadcasting materials and equipment was reviewed (changeover from solid-state type transmitters to vacuum-tube type ones). (2) Part of the standards for MW broadcasting equipment was reviewed (changeover from solid-state type transmitters to vacuum-tube type ones). (3) Same as left (4) Same as left (5) Same as left (6) Same as left
2. Implementation schedule	January 1989 to March 1992	June 1989 to August 1992
3. Project cost Foreign currency Local currency Total ODA loan portion Exchange rate	 ¥13.587 billion ¥2.611 billion ¥16.198 billion ¥16.198 billion KES1.00 = ¥7.43	 ¥12.839 billion ¥2.603 billion ¥15.442 billion ¥15.442 billion KES1.00 = ¥7.42