

CONCLUSION

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The main purpose of the study was to provide a detailed record of different distance learning approaches applied in non-formal education, and to present a set of conclusions about their effectiveness, cost, limitations and potential.

The study set out to examine the experiences of a range of distance non-formal education programmes in different geographical and socio-economic contexts in Africa. The five case studies also represented different fields of activity and curricula and, to a certain extent, different delivery methods. This was to ensure that comprehensive data were collected to allow for comparisons between programmes and for the identification of different factors that conditioned the performance of various distance non-formal education programmes.

This chapter highlights the main aspects of the case studies and outlines common problems identified in the case studies, conditions contributing to success and lessons learned in different settings. It draws heavily on Dodds' (1999) article.

The Ghanaian case study focuses on the use of radio to support functional literacy in the Volta region (effective coverage of 200 km radius) and Northern Region (effective coverage of 95 km radius). Radio programmes were expected to provide:

- information that would help change the lifestyle of learners

- complementary support for themes taught in the primers
- a forum for learners to discuss issues with each other
- a medium through which learners could practise their literacy skills
- news and information for learners and the general public.

The use of radio strengthened the coverage, by the literacy programme, of the functional and development themes. It changed, among other things, people's attitudes towards family planning and contributed to the establishment of income-generating ventures. However, the programme experienced a number of problems including poor radio infrastructure and inadequate air time to offer literacy in 15 languages.

The African Medical Research Foundation (AMREF) is a health worker and paramedic training programme which was first set up in Kenya in the 1960s. It targets a wide range of health workers, including fully qualified doctors, midwives and community health workers often with minimal training. It offers a wide range of courses and uses correspondence courses and radio programmes. The target audience and methods of provision of the Distance Education Programme of the Ugandan Ministry of Health are similar to the Kenyan AMREF programme. Large numbers of health workers have

participated in the Kenyan and Ugandan programmes (8,000 over the years in the AMREF project and 6,000 in the Distance Education Programme in Uganda). One of the major achievements in both programmes is the reported gain in knowledge among health workers and changes in attitudes and practices.

Problems experienced in the two programmes include few face-to-face sessions due to financial constraints, and lack of formal recognition of certificates obtained at the end of the courses.

The Tanzanian INADES-Formation targets farmers (men and women, regardless of educational background); extension and development workers, or animateurs; social development workers; and development management staff from rural/community and agricultural enterprises. The programme offers a course in Management for Development, in addition to agricultural training. The latter is offered mainly through a correspondence course reinforced by locally-organised face-to-face seminars. Tutors occasionally undertake visits to groups of students. Among the achievements of the programme is the increased income from crops among the peasant farmers and the transformation of some groups (of farmers) into income-generating groups. Problems and constraints include the inadequacy of financial and human resources to provide face-to-face support.

The main objectives of the Zambian Radio Farm Programme are to enable radio listening group members to:

- apply the technical information they receive through the broadcasts in their own farming practices
- identify and describe some of the common crop and animal diseases and pests
- advise other farmers on good farming practices.

The programme helps over 21,000 small-scale farmers/peasants in rural areas, who listen to and participate in the programme, to learn new knowledge and develop new skills. There was evidence of changes resulting from the Radio Farm Form programmes, which included changes in attitudes to slash and burn shifting cultivation and to certain crops, which were previously seen as women's crops. The implementation impact of the programme is, however, limited by poor radio reception in remote parts of the country, and the high cost of transmitting the programme in many languages.

Researchers employed a variety of methods – questionnaires, interviews from group discussions and in some cases physical analysis of course materials – which produced both quantitative and qualitative data. This variety, and the depth of the investigations in each case study, brought out information from which conclusions can be drawn on the performance of distance non-formal education programmes.

1 ORIGIN AND PURPOSE OF THE PROGRAMMES

The programmes in the study were developed or adopted as a direct response to the problems that have characterised the rural development sector in Africa since the 1960s. These include high illiteracy rates, high poverty levels, low agricultural production and poor or inadequate health services. On the whole, the original objectives of the non-formal education programmes have remained valid – principally to serve the learning and development needs of rural adults.

This is despite the fact that some of the programmes developed as part of wider socio-economic development strategies originating from outside of the countries in which they operate. For example, the Radio Farm Forums in Zambia were part of the movement that started in Canada in the late 1930s, was

adopted in India in the 1940s and 50s and was later adopted in Africa (Ghana, 1964 and Zambia, 1966). The Kenyan and Ugandan programmes are part of an international non-governmental organisation, the African Medical Research Foundation (AMREF) based in Kenya and operating in East Africa. The INADES-Formation-Tanzania programme is part of the movement that started in the early 1960s in francophone Africa, while the Ghanaian literacy programme builds on early efforts in that country, some of which were part of the global literacy programmes spear-headed by international non-governmental organisations such as UNESCO.

The fact that most of the programmes have been in existence for a long time suggests, among other things, that their objectives and content are still relevant to the needs of the target populations. They are long-term programmes as opposed to short-term projects and have survived for as long as 30 years in some countries (for example INADES, from which the Tanzania project is derived, and the Zambian farm forum).

2 CURRICULA

In general, the main aspect of the curricula in the case studies is that they are designed to uplift the standards of living of the rural people by providing them with opportunities to acquire basic literacy and numeracy skills and improved health and agricultural practices.

Therefore, the curricula in all the programmes appear to be directly related to the socio-economic activities and needs of the communities they were established to serve. In all the case studies, the curricula deal with subject matter of immediate practical life-related topics.

However, curricula vary in terms of design, structure and flexibility, which probably shows the influence of the contextual factors as well

as the objectives and target audiences of specific programmes.

3 TARGET AUDIENCE

The study confirms that distance education non-formal programmes in Africa cater to the needs of different target groups, but mainly the poor and vulnerable rural communities. In the literacy and agricultural education programmes, the target population are mainly rural men and women with little or no prior formal education who need basic literacy and agricultural skills to live a more productive life.

The health education programmes in Kenya and Uganda present a different picture in that the official target audience is the whole range of health workers in the respective countries (from fully-qualified medical doctors to midwives and community health field workers often with a minimum of training). However, in practice, the main body of participants is drawn from the more junior health workers and paramedics such as nursing aides, patient attendants, nurses and public health technicians. This is important in the sense that these are the categories of workers who work in local communities, at grass-roots level, where health problems are more severe. Their past formal educational experience and qualifications also tend to be quite limited and therefore more similar to those of the audiences of the other projects.

The case studies therefore show that distance non-formal education can benefit the rural poor by direct participation in the programmes or by improving the professional competencies of those who serve them such as in the field of health education.

4 MEDIA AND DELIVERY METHODS

Although the programmes in this study were designed or started as multi-media programmes, there were evident changes in the combination and use of media, indicating some operational and financial difficulties. For example, in the Ghanaian Literacy and Functional Skills Programme, the radio series were originally intended to lead the classes to form discussion groups/forums about the functional themes. However, in practice they supported the classes mainly by concentrating on developing functional themes, presenting news and information about the classes and providing a medium for learners to demonstrate and practise their skills.

In the Tanzanian and Ugandan case studies, the increasing numbers of learners, wider and growing geographical coverage and scarcity of financial resources/economic constraints were increasingly making it difficult to provide face-to-face sessions.

The predominance of one medium in many of the case studies (radio in some case studies and correspondence courses in others) tends to weaken the effectiveness of the programme. However, it seems clear from the study that radio not only enhances the implementation impact of programmes but also has great potential for improving the overall effectiveness of programmes. Despite problems of poor reception evident in some countries, it is clear that wider-ranging and wider-reaching radio programmes can provide effective support to correspondence courses and discussion groups such as those in literacy programmes and radio farm forums.

However, the effective use of radio in such cases appears to depend on carefully planned systemisation of radio programmes and forum discussion or literacy lessons in terms of timing, content, and structure of programmes.

One overall conclusion that can be drawn in this area is that the traditional media (correspondence/printed materials and radio) have contributed to the success of the non-formal education programmes in a number of ways.

- They provide wider coverage or reach larger numbers than normal traditional methods would allow. This is evidenced by the large numbers of participants in the health education programmes in Kenya (8,000 enrolled for AMREF courses over the years out of 40,000 health workers) and Uganda (6,000 enrolled in the programme out of 11,000 health workers) and by the Zambian case study in which an estimated 21,000 farmers (mostly peasants) listen and participate in the Radio Farm Forum programme. Over 50,000 learners in the Northern Region of Ghana were able to listen to the Radio Savana functional literacy programme in two years.
- There is evidence of changes in the audiences' knowledge levels, practices, attitudes towards development, modern methods or socially accepted behaviour. For example, in Zambia there was evidence of changes resulting from the Radio Farm Forum programmes, which included changes in attitudes to slash and burn shifting cultivation and to certain crops which were previously seen as women's crops. In Ghana, radio changed, among many things, people's attitudes towards family planning and environmental preservation and contributed to the establishment of income-generating ventures. The Kenyan and Ugandan case studies also report improvement in knowledge and changes in attitudes and practices.
- There is evidence that the methods could be used on an even wider scale at acceptable costs if resources and political will were available. An important example in this area is the Ugandan case study, where costs

suggest that distance learning courses are about two and a half times cheaper than their equivalent in more traditional face-to-face training methods.

However, a lot more is required in terms of organisation, systematic utilisation of media combinations and infrastructural development to ensure that the potential of these media is sufficiently exploited for the benefit of the rural masses.

5 GOVERNANCE

Effective collaboration and partnerships in the delivery of distance non-formal education programmes are evidently an important determinant of success. The use of radio, in particular, requires formal links between the provider/co-ordinator of the non-formal programme and the broadcasting organisation. And it is more useful and effective when roles and responsibilities are clearly defined and mutually agreed. However, the Ghanaian case study shows that collaborative activities are not without problems and limitations.

Secondly, the involvement of government agencies or departments can provide the necessary political support and ensure that a programme operates within, and is supported by, a broader socio-economic policy framework. The survival, for many years, and the appreciable impact of the Radio Farm Forums in Zambia and, to a certain extent, the health education programmes in Kenya and Uganda can be attributed in part to the involvement of government in the governance and delivery of programmes.

Thirdly, the involvement of local communities in programme management and delivery can be crucial in enhancing the impact of a programme. For example, in Zambia there is an interesting mixture between a government-run programme and locally self-regulated community groups.

Although the above do not provide a model for governing/managing distance non-formal education systems, they suggest the need for collaboration, especially in the use of radio, and for community involvement in the delivery of programmes.

6 PROGRAMME IMPACT

The visible impact in all the case studies – particularly in the development of positive attitudes towards participation, especially among women – is an important pre-condition for socio-economic development and for the eradication of poverty and disease. Perhaps more importantly, parents who value education are more likely to encourage and support their children to attend school, an important pre-condition to the achievement of basic education for all. At present, millions of children are excluded from school because of poverty and socio-cultural marginalisation, among other reasons. The literacy and education level of parents are the important predictor of their children's learning achievement.

It is evident from the study that distance non-formal education programmes in Africa reach out to comparatively larger audiences than would be possible if distance learning methods were not applied. It is impossible to draw comparisons between, or general conclusions from, the enrolment figures of the different projects as they are so disparate in their organisation and objectives. However, some of the actual figures of the numbers reached are significant. Out of 40,000 health workers in Kenya, at any one time about 8,000 enrolled for AMREF courses over the years, while in Uganda 6,000 out of 11,000 enrolled and participated in the programme. In Zambia it is estimated that more than 21,000 farmers listen and participate in the Radio Farm Forum programme. Given that the programme has been in existence for more than 30 years, it

has reached significant numbers of Zambian small-scale farmers.

It is particularly significant in the Zambian case study that at a time of declining resources for government social services such as extension services, the Radio Farm Forum can reach farmers who would very rarely, if ever, be visited by agricultural extension officers.

In Ghana over 50,000 learners in the Northern Region were able to listen to the Radio Savana Functional Literacy Programme in two years. However, in Tanzania there were signs of declining enrolment figures, with only 651 correspondence course enrolments between 1997 and 1999.

Of particular importance is the comparatively large number of women participants in some programmes, notably in the Volta Region (Ghana) where 70 per cent were women. In Zambia nearly half (48 per cent) of participants/listeners were women.

The study also shows that distance non-formal education offered through various media enables learners to gain useful new knowledge and skills and to change their practices and behaviour. The programmes are, in the majority of the case studies, popular, in high demand and offer relevant content. The impact of the programmes can be summarised as follows.

6.1 Ghana

Radio programmes enabled listeners to gain a deeper understanding of important topics such as intestate succession law, bush fires, breastfeeding and teenage pregnancy. Radio programmes also increased women's awareness of the need to be able to read and write and led to an increase in the enrolment of women in the literacy programme.

In addition, the literacy programme motivated people to start income-generating activities, to

deal with problems relating to water and sanitation and to understand and practise family planning. Significantly, the resolution of the ethnic conflicts in the Northern Region, experienced between 1994 and 1996, was credited to the Functional Literacy Programme, especially its radio component that preached peace.

The increase in understanding, appreciating and attention paid to the functional themes is important because these themes are the main justification for investment by the World Bank, and often by other donors and governments, in such projects.

Also, the very significant indication of heightened learning, understanding and implementation of functional themes is an important indicator of success, given the widely acknowledged view that the implementation of functional skills is the most difficult part of functional literacy.

Moreover, the changes in attitude towards the implementation of several of the functional themes attributed to radio are important because it is known from experience that changes of attitude are a prerequisite for effective implementation of social and economic change.

The popularity of the use of radio in the programme was evidenced by, among other things, the fact that communities were prepared to make significant financial and other contributions. The use of facilities of the radio stations by other organisations, particularly in the Northern Region where Radio Savana has entered into partnership arrangements with both governmental and non-governmental organisations in the region to provide education to its listening public, is a further indication of demand for the use of radio to promote non-formal education.

The overall conclusion, therefore, is that the radio support experiment effectively

demonstrated the potential of radio to strengthen the literacy and other developmental activities of Department of Non-formal Education as well as of interested NGOs, even though the national literacy programme in Ghana itself failed to incorporate radio on a nationwide scale.

6.2 Kenya and Uganda

Programme participants and their tutors and field supervisors in both countries consistently stated that the courses were highly relevant to the work of rural health workers. They further reported a noticeable improvement in the performance of health workers in terms of knowledge, attitudes and practice.

This was attributed by learners, their tutors and supervisors to the printed courses, which they believed were effective as self-study materials and whose quality they were happy with. In both countries, learners who listened to radio programmes (70 per cent of those who responded in Kenya and 40 per cent in Uganda) were satisfied with programmes and felt that they helped them to study and understand the printed course materials. Significantly, although face-to-face tutorials were very rare in both countries, learners felt they were very effective and supportive when they actually took place. They would have liked more of them.

6.3 Tanzania

Although there were signs of declining enrolments in correspondence courses, there was a generally high level of satisfaction with the level usefulness and relevance of courses. However, there was a considerable amount of criticism of the training methods, with a strong feeling that printed materials themselves were not adequate. There was a demand for much more face-to-face contact and follow-up from the INADES tutorial staff. Despite these limitations, those who responded reported a positive impact from the courses, mainly on a

personal level. Gains indicated included being able to lead groups and to conduct meetings, increased income from crops, and recognition as master farmers who now play a training and motivating role in their villages for other farmers. Of great importance also is that some groups have become income-generating groups.

6.4 Zambia

Most of the Radio Farm Forum participants found the programmes relevant because they learnt about real life situations and gained a variety of skills from the programmes without the help of the Agricultural Extension Officer. The new methods of farming gained from the forums are known to have increased their yields. These include pot-holing, contour ridging and crop rotation, control of cattle diseases and the use of cow manure. Other skills were water ponding, use of donkeys as draught animals and the construction of more durable crop storage barns.

The changes in farming practices, which were confirmed by Agricultural Extension Officers, were accompanied by significant changes of attitudes as a result of meeting in forums, listening to the programmes and discussing the suggested changes with farmers and their neighbours. Significant changes were evident in soil conservation and general environmental preservation. But perhaps more interesting is that there were attitude changes towards some crops, which were previously seen as 'women's crops' and are now recognised as highly priced cash crops as well as good for the soil. Equally important is that attitudes towards women's participation in farming and their need to learn new methods have also changed, and that farmers encourage their wives to join them in practising what they learn.

The overall conclusion, therefore, is that farmers who participate in Radio Farm Forums find the combination of radio programmes, supporting printed materials and discussion of

the content and its application in their farm groups effective in promoting new knowledge, changing attitudes and persuading them to implement what they have learned and discussed.

The Zambian case study shows that one of the major advantages of the Radio Farm Forum movement is that it encourages farmers to study and learn together with other members of their communities, and this facilitates the common implementation of new practices.

7 COST

Although the full costs of delivering the programmes were in most case studies not available, it seems that the cost of providing them is higher than what most providers can easily afford. The high cost of field work, visits by production and support staff and face-to-face sessions tended to weaken the implementation impact of programmes in all countries under study.

However, on the basis of the large numbers of participants in these programmes and the positive impact recorded, it can be concluded that media-based non-formal education programmes are more cost-effective than traditional face-to-face programmes. Indeed, the costing evidence from Uganda suggests that the courses are about two-and-a-half times cheaper than their equivalent in more traditional face-to-face training methods.

8 COMPLETION RATES

Completion and retention figures cannot be taken as comparable between projects, nor can general conclusions be drawn from them because of differences in programme characteristics, particularly in terms of learner/participant characteristics, content, lengths and demands of courses. Also, there

was not much reliable data on completion and retention rates.

Completion and retention rates varied from one programme to another. In Kenya, completion rates were about 43 per cent, with another 41 per cent continuing as active students. In Uganda, only 11 per cent appeared to have completed, though another 17 per cent continued as active students. In the Tanzanian INADES programme, less than four per cent of the 651 students had completed all stages of the course for which they enrolled. Nearly half, or 48 per cent, had dropped out – that is, had failed to complete an assignment sheet in nine months. Significantly, completion rates appear to be somewhat higher internationally than those reported in Tanzania, though enrolments internationally are also dropping.

It appears that one of the main contributing factors to non-completion (in the case of the Kenyan and Ugandan case studies) is the failure of either government to give formal recognition for promotional/career purposes to the certificates awarded to successful completers. Possibly the higher completion rate in Kenya corresponds to an apparently stronger informal recognition of the certificates by health authorities than in Uganda.

The Zambian study does not provide detailed statistics of membership, of the length of time individuals remain members of forums or of the regularity of attendance at forum discussions.

9 PROBLEMS AND CONSTRAINTS

The nature and magnitude of the problems vary from one case study to another. In general, the following problems and constraints can be identified.

9.1 Underdeveloped communication infrastructure

The problem created by the underdeveloped communication infrastructure is exemplified by the Ghanaian and Zambian case studies. In Ghana, the poor radio infrastructure means that a large part of the country is not adequately covered for radio support to literacy. In Zambia, where radio coverage has improved, many remote parts of the country still experience poor reception because of low-wave output from the Zambia National Broadcasting Corporation transmitters.

9.2 Multi-lingualism

In Ghana, with the commitment to offer literacy in 15 Ghanaian languages, it has proved virtually impossible for the Ghana Broadcasting Corporation to provide adequate air time to the Non-Formal Education Department to make a meaningful input into the National Literacy and Functional Skills Programme.

In Zambia, the need to broadcast programmes to Radio Farm Forums in many different languages is inevitably expensive in terms of personnel as well as air time, which now has to be paid for by the provider of the programme, the National Agricultural Information Services.

9.3 Inadequate resources

A shortage of human and financial resources is a major constraint in the effective implementation of programmes.

In the Tanzanian case study, the major problems and constraints to the continuing success of the correspondence courses were lack of personnel to provide face-to-face support for correspondence students, isolation of those students and therefore their limited community impact, and lack of other media combinations to reinforce the printed courses. These constraints have led INADES to change

its approach, which in turn has lessened the emphasis on, the resources available for, and therefore the impact of the correspondence course programme.

In Zambia, there are declining government resources for the Radio Farm Forum programme as there are for agricultural extension generally. There are no radios available for distribution to the forums, no money for batteries and some evidence that there is less available for supporting printed materials. This is, however, partly offset by the encouraging evidence of some NGO support for the forums and of a growing movement of self-help forums, which are organisationally self-sufficient. More worrying as a sign of declining government support is the evidence that the programme now has to pay ZNBC for air time at commercial broadcasting rates.

Another problem is the evidence of very limited contacts between the farmers who are forum members and the Agricultural Extension Officers in their localities. It appears that this is mainly a result of lack of resources to travel to visit the forums available to the agricultural extension service rather than a lack of interest in or support for the forums on their part. Such close relations between the forums and other existing farmer support services is an essential component of an expanded effective forum movement.

A final problem identified is the change in the qualifications expected of Agricultural Information Officers, which threatens the careers of the officers who have, to date, produced the programmes and of the regional officers who have fed in regional news and recordings. Without such people and the experience they have accumulated it will be difficult to maintain the programmes.

In the Kenyan and Ugandan case studies, there was a general feeling among learners that the face-to-face tutorial component is much too infrequent and irregular. Many

suggested that this infrequency is a major cause of non-completion. This situation inevitably appears to be worsening with growing financial constraints.

Some concern was expressed that the courses are targeted at too wide an audience in terms of the academic and professional training background of the learners. This means that the achievement of learning for some completers cannot be guaranteed as their capacity to understand and implement certain health-care measures is dependant on prior knowledge which, in these cases, is not there. It was suggested by those that expressed this fear, and they were mainly more senior medical practitioners, that the courses should be more specifically targeted and that there should be more of them more clearly graded in terms of difficulty and of pre-requisite training.

The most serious problem and constraint, however, particularly in Uganda, is the low completion rate of enrolled learners. In Uganda this was very strongly attributed to the failure of the Ministry to give career recognition to the certificates awarded on completion, in spite of widespread recognition both of the relevance and effectiveness of the courses.

10 SUSTAINABILITY

The case studies provide not only lessons on the performance of distance non-formal education programmes in different socio-economic environments but also lessons on sustainability.

10.1 Ghana

The story of the use of radio for functional literacy in the 1990s in Ghana is a patchy history. There have been two separate attempts to incorporate radio; on both occasions it has been shown to be technically feasible and has shown evidence of

considerable potential contribution to the success of the functional literacy campaigns themselves.

Administrative and organisational problems, however, have led to the failures to make the attempts sustainable. The tools are there (though not everywhere); the will to use them widely is not. The likelihood of the national radio system spreading radio coverage for functional literacy nationwide in the foreseeable future is low. The only likely option for NFED is to forge agreements with the growing number of private and community FM radio stations as they come into being. Pressure to charge commercial rates for air time to bodies like NFED will make this difficult.

10.2 Tanzania

This study shows clearly that INADES in Tanzania is moving away from the method of farmer education for which it was previously best known. Its reasons are clear and wholly acceptable. Individual learning by very limited numbers of farmers in any community is a very slow, and probably not very effective, way of bringing about social and economic change in whole communities. The original combination of methods, however, especially when reinforced with other media, as appears to have happened effectively in Cameroon, seems to have had the potential to be successful and to have achieved significant success at earlier stages.

The question is whether the more recent isolation of the correspondence students and of the method itself justifies its abandonment altogether, or whether the new policy orientation can find ways to utilise the old methods in new or renewed combinations to strengthen and extend the organisation's coverage beyond what it can achieve predominantly through intensive face-to-face methods.

10.3 Zambia

The Zambian case study shows that the Radio Farm Forum programme has been successfully sustained for a very significant period of time. It has proved its potential to reach large numbers of farmers in remote rural areas and to help them to learn new knowledge, develop new skills and change both their attitudes and practices in favour of more effective farming techniques.

It could, given political support and the necessary, quite modest, resources, be used on a much larger scale. It is, however, threatened by changing political perceptions about the financing of such adult education and about the broadcasting infrastructure on which it depends. Without adequate personnel and financial resources, at least at the level at which they have been available for the last 30 years, the programme cannot survive. Farmers in Zambia will be much worse off without it.

10.4 Kenya and Uganda

Once again, from the two studies in Kenya and Uganda it appears that the methods can be made to work effectively as training methods. The courses are relevant; learners feel they gain new knowledge, skills and improved attitudes; both they and their supervisors believe they become more effective health workers as a result of the training. Moreover, the demand for the courses and their availability means they have been able to reach very significant proportions of their main target audiences in the two countries. Finally the costing evidence from Uganda suggests they are about two and a half times cheaper than their equivalent by more traditional face-to-face training methods.

The sustainability of the two programmes, however, is threatened by two main factors:

- the failure to give the courses, and the certificates which are given on completion,

adequate career recognition in government health service

- the fact that, after many years of operation, they are both still largely dependant on external funding. Such funding, especially for long-term programmes, is becoming increasingly scarce.

11 FACTORS CONTRIBUTING TO SUCCESS

From the case studies, the following factors appear to contribute to the success of non-formal distance education programmes (and their absence decreases the likelihood of success).

11.1 Factors related to media and methods

One outstanding feature of non-formal education is the predominance of the use of radio. In the more successful projects, where there is evidence of significant changes in knowledge, attitudes and practices among the learners as a result of the project, the use of radio is combined with other media such as print and study groups or discussion forums. This is probably because radio remains by far the most accessible medium to the main target audiences of such programmes.

From the providers' point of view, radio remains comparatively cheap to produce and distribute (though note the exception of Ghana, where the radio infrastructure has been noticeably poor). Radio also crosses the literacy barrier: the still huge numbers of illiterate adults in Africa can and do learn directly from the radio. The audience of the Zambian Radio Farm Forums saw radio as their only means of receiving regular farming education and information.

The case studies presented in this report show clear evidence that radio is popular with the

target audiences. They show that it can, especially in combination with group discussion, help the target audiences to change their attitudes to aspects of development which, in turn, can lead to significant changes in practice.

As regards functional literacy (where radio is sadly seriously under-utilised), the Ghana experience shows that radio can make a particularly strong input into increasing understanding of functional or development themes as well as increasing the audience's ability to and likelihood of implementing such themes. Even in the INADES case study, where print dominates, past experience suggests that print combined with radio is more effective than print on its own.

The second major message is that radio, combined with and reinforced by study group meetings or discussion forums supported by simple printed materials, is a very strong combination for the target audiences of adult basic and non-formal education. It is perhaps worth stressing that the combination does not have to be simultaneous. In Ghana it seems clear that the learners usually listened to the radio by themselves at home, not in groups, and discussed what they heard later when they met for their literacy classes.

The third important factor which contributes to the success of such projects, or hinders and lessens the success if absent, is the close and careful integration of the media, both radio and print, with the face-to-face sessions, be they discussion groups or classes. This in itself requires the training of the respective media producers and the class organisers not only in their respective skills but also in how to work together as inter-dependent teams. These teams will often cross traditional institutional boundaries and require joint planning and supervision by leaders from all institutions involved.

Two important cost factors are fighting against the effective use of combined media approaches such as those illustrated in the case studies. The first is growing pressure on broadcasting bodies to commercialise their air time and to charge educational institutions for using it. This results in a growing reluctance to subsidise the use of radio for adult education purposes. The second is the fact that the combination with organised face-to-face meetings, whether forums or classes, adds significantly to the cost of the programme as a whole. It is therefore dropped or cut back as the first stage of economising on the provision of such services.

One final media factor arising from this study and from the study by Dodds (1996) is that there is very little evidence that the more modern information and communication media, the computer-based media, are available to the intended audiences of adult basic and non-formal education in Africa. Any projects which rely on such technology to diffuse adult basic and non-formal education will, for the immediate future at least, automatically exclude most of their intended target audience.

11.2 Organisational and administrative factors

It is clear that the more successful NFE programmes involve close collaboration between several different agencies, sometimes between different government ministries, sometimes between government and NGOs. The case studies show good examples of collaboration – for instance, between the Zambian National Broadcasting Corporation and the National Agricultural Information Services; and between local NGOs and the Ministry of Agriculture, Food and Fisheries. Bad examples include Ghana, where a major constraint has been the failure of GBC and NFED to establish effective long-term working relations for the national functional literacy campaigns.

In the AMREF case study, excellent working relations have applied in terms of implementation of the programme both between AMREF and the Kenya government and, in its establishment, between AMREF and the Uganda government. However, a major constraint, especially in Uganda, has been the failure to give government recognition for career purposes to the certificates awarded for successful completion of the courses.

It has to be concluded that a major factor making for success and sustainability for such programmes is effective and continuing working relationships and administrative structures, through which professionals from different agencies can work together as a team in spite of institutional divides. Similarly, such programmes require proper co-ordination between the centre and the local offices of the national agencies, and between them and the local groups, which are often voluntary. Where such relationship structures do not exist or are ineffective, the programme either fragments or is much less effective than where such structures are in place.

Finally, a contributing factor to organisational and managerial success is staff development possibilities and clear career lines for staff involved. Again, the inter-institutional nature of such programmes makes such staff development plans difficult to design and implement.

11.3 The political will factor

From all the studies of experience in non-formal education, whether using open and distance learning media or not, it is becoming increasingly clear, at least to the author, that the major factor making for success, for sustainability or for failure or marginalisation is political will.

In Ghana, as indicated in the Ghana case study, when the Head of State announced in his New Year address to the nation at the

beginning of 1990 that the National Literacy Campaign had to be launched, before the pilot projects had been implemented, small-scale programmes became national programmes overnight. Though this caused initial administrative chaos, it meant that many adults became literate earlier than they would have done otherwise. It also meant that the World Bank was persuaded to make a significant loan to a national literacy campaign, which would almost certainly not otherwise have been made available. Out of that loan, and almost certainly impossible without the expressed political will to make it happen, the two radio stations were renovated with non-formal education at the top of their agenda.

Without such overt expressions of political will, it is almost impossible to persuade education officials from the formal sector to give adult basic education and non-formal education the status they need to attract resources and recognition. The political will, however, must be sustained and must be applied to details such as recognition of non-formal training for career purposes and for educational equivalency progression purposes.

12 CONCLUSION

This report has examined in some depth five case studies with a view to identifying common problems, factors contributing to success and lessons learned in different settings. One important conclusion that can be drawn is that distance non-formal education programmes have a great potential to deal with problems of poverty, illiteracy, low agricultural production and poor and inadequate health services in rural communities of African countries. Secondly, the case studies demonstrate that distance learning approaches have the potential to enhance the contribution of non-formal education to socio-economic development in Africa.

12.1 Potential

As shown in section 6 of this chapter, distance learning approaches in non-formal education programmes can:

- reach larger numbers of learners/participants over wider geographical areas than traditional methods would allow
- deal with the problem of shortage of qualified field workers in agriculture, literacy, community development and health
- allow people with little or no formal education to participate actively and productively in non-formal education programmes
- encourage people not only to participate in non-formal education activities but also to make contributions towards the financing and management of the programmes
- be effective in improving knowledge and skills levels of the audiences/ participants, in changing peoples' attitudes/behaviour and in motivating rural communities to undertake action leading to the improvement of their socio-economic conditions
- increase personal and community/group income through the establishment of income generating ventures
- provide non-formal education more cost-effectively than traditional methods.

12.2 Challenges

Despite the potential and actual success recorded in the case studies (see sections 4 and 6 of this chapter), the programmes experience a number of problems and constraints.

One major problem relates to an under-developed communication infrastructure. For example, the poor radio infrastructure in Ghana leaves a large part of the country

inadequately covered for radio support to literacy, while in Zambia remote rural areas still experience poor radio reception. Secondly, there is inadequate air time to transmit radio programmes in many languages. Here again the Ghanaian and Zambian case studies are good examples.

The shortage of human and financial resources affects the operations of all the programmes reviewed and tends to limit their implementation impact. The lack of personnel and financial resources to provide face-to-face support particularly affected the Tanzanian, Kenyan and Ugandan programmes.

Insufficient financial resources generally affected the Ghanaian and Zambian programmes. The shortage of qualified staff to produce and deliver programmes and provide professional support to groups is also evidenced by the Ghanaian and Zambian case studies

12.3 Lessons

From the achievements and problems recorded by the case studies (see sections 4 to 6 of this chapter) a number of lessons can be derived regarding distance non-formal education in Africa. Some of these lessons are as follows.

The Kenyan and Ugandan case studies show the need to develop courses and their accreditation in partnership with relevant governments or other employers from the start to ensure recognition. Related to this is the need for effective collaboration and partnerships and clear organisational structures in the delivery of distance non-formal education programmes.

It is also important to locate such programmes within broader national socio-economic policy frameworks and to involve, where possible, government agencies and local communities in the running of programmes

All the case studies demonstrate that when the curriculum is directly relevant to the target audience's everyday life and to their socio-economic activities, active participation is encouraged. For example, in the Kenyan and Ugandan case studies various categories of health workers participated in the programmes because they found the courses relevant and useful to their work, even though the certificates were not formally recognised by the Ministries of Health.

In addition, a relevant curriculum promotes a sense of ownership. This is evidenced by the contributions in money and in kind in the Ghanaian literacy programme. It can also encourage direct application of knowledge and skills, as in the Zambian case study where the Radio Farm Forum programme encourages and facilitates common implementation of new farming methods.

The difficulty experienced by researchers in obtaining information on participation/retention and completion rates suggests the importance of efficient management information systems (MIS) in non-formal education programmes. The case studies did not demonstrate any existence of comprehensive MIS, an essential tool for monitoring the performance of the programmes and for providing periodic data to make necessary management decisions.

Traditional media, particularly printed materials and radio, are still relevant and can be effective in improving the implementation impact of non-formal education programmes. However, they seem to work more effectively when they are used in combination. The Kenyan and Ugandan case studies show that printed materials can be more effective when supported by radio lessons and face-to-face sessions.

Similarly, radio programmes can provide effective support to printed materials and discussion groups such as those in literacy

programmes (for example, Ghana) and Radio Farm Forums (for example, Zambia). However, carefully planned systemisation of radio programmes and forum discussion or literacy lessons is necessary in terms of timing, content and structure of programmes.

Where the effective use of radio is constrained – on account of infrastructure, language or unsuitable listening times (as in the Ghanaian and Zambian case studies) – audio cassettes can be an effective substitute. Audio cassettes have a number of advantages, one of the most important ones being the freedom from the serious constraints of broadcasting schedules. However, the availability of audio cassette players is still lower than that of radio receivers. There may therefore be increased distribution costs associated with their use for these purposes.

Another way of dealing with the problems of radio broadcasting shown in the Ghanaian and Zambian case studies may be the establishment of local community radio stations, a possibility illustrated by the Ghanaian case study.

The case studies also provide an important lesson in terms of the cost and sustainability of distance non-formal education programmes. Undoubtedly, the large numbers of participants reached and the positive impact recorded are evidence that distance non-formal education programmes are more cost-effective than traditional face-to-face programmes. The Ugandan case study, in particular, provides cost figures which suggest that media-based courses are two-and-a-half times cheaper than their equivalent in more traditional face-to-face training methods.

However, distance non-formal education programmes are not necessarily cheap per se. The cost of course production and running costs (including field visits by production and support staff, face-to-face sessions and transmissions) can be higher than what most

providers can afford. It is not surprising that most of the programmes reviewed in this study depend heavily on external financial support, without which some would probably collapse. Notwithstanding this, the evidence shown that distance learning would be used on an even

wider scale at acceptable costs if resources and political will were available demands the development of policies and strategies for sustaining distance non-formal education programmes.

13 REFERENCES

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