

# APEX: AN EXTENSION STRATEGY FOR EDUCATING FARMERS IN POPULATION AND ENVIRONMENT ISSUES WITHIN THE CONTEXT OF FARMING PRACTICES

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Necessary reference information should also be provided by the teams to the farmers such as on agricultural inputs suppliers, marketing of produce, family planning clinics, counselors and doctors in the vicinity, anti-pollution lobby groups and institutions, NGOs, etc.

## 9 Impact assessment

The impact of APEX interventions should be assessed jointly by the farmers' groups and the APEX field teams. The impact should be measured against the data collected before initiating APEX interventions on the knowledge, attitude and practices of men and women farmers, including rural youth. Any visible changes such as measures taken by the farmers to keep their village pollution-free and the use of population education counselors and clinics should be mentioned as positive impact. The results of the assessment may be used for planning future activities on the topic.



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The global advocacy for sustainable rural and agricultural development demands from agricultural extension workers that they educate farmers in population and environment issues, presenting them in a context that is easily understood by the farmers. The APEX (agriculture, population, environment extension) strategy was developed over a period of many years in Egypt under a Government of Egypt/UNFPA/FAO project, and has proved to be very effective for this purpose.

The strategy is recommended for developing countries that are confronted with problems of rapid population growth and environment pollution in rural areas.

This normative approach may also be used for integrating other subjects such as HIV/AIDS education into ongoing agricultural extension programmes.



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## LET FAO HELP

This technical brief was prepared by Dr M. Kalim Qamar, Senior Officer (Agricultural Training & Extension) at FAO headquarters. To obtain further information on the Egyptian project, and possible FAO technical assistance in the area of integrating population and environment education messages (and messages on other relevant subjects such as HIV/AIDS) into agricultural extension programmes, contact the country FAO Representation Office, or:

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## The APEX strategy

The strategy comprises two types of activities: preparatory and field.

### PREPARATORY ACTIVITIES

#### 1 Identification of the recipient population for APEX messages

Target rural population will be farmers, including youth. The farmers may be divided into categories depending on their special agricultural interests, education, gender, age, etc.



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#### 2 Organization of the target population for participation purposes

Men and women farmers should be organized into homogenous groups, for the purposes of programme planning, receipt of APEX messages, discussions with the field teams, problem-solving, decision-making and assessment of the impact of the APEX interventions.

The groups may elect their own leaders. The formal and informal

leaders, elected by groups and/or selected by the extension staff may be given a title, such as Rural Opinion Leaders.

#### 3 Composition of the APEX field teams

Gender-sensitive, interdisciplinary APEX field teams, each comprising front-line staff representing agriculture, population/health and environment disciplines, should be formed to perform field activities. The leading role in the field teams should be played by the extension workers of the Ministry of Agriculture. Other field staff such as from the Ministry of Youth Development or the Ministry of Social Welfare/Development may also be brought aboard. In addition, the Rural Opinion Leaders and educated farmers may be used as resource personnel. The APEX teams will organize farmers' activities in the field as well as at places like agricultural extension centres, health centres and youth clubs. If a country has only private extension advisory services, the government may contract them for implementing the APEX strategy.

#### 4 Technical preparation of the APEX field teams

##### Preparation of training curricula

Three sets of curricula should be prepared for providing training to various categories of staff and farmers.

The first set, which is the innovative and unique feature of the APEX strategy, should focus on the interrelationship between farming practices, population and environment, supported by specific examples from real life, which the farmers are familiar with.

The second set should focus on meeting the training requirements of the APEX field teams in the following areas: (a) technical subject-matter, i.e. to develop APEX messages on the interrelationship between farming practices, population and environment; (b) organization of groups in villages; (c) preparation and use of APEX materials by the APEX teams while visiting the farmers; (d) involvement of group members in discussions, problem-solving, decision-making and programme



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planning; (e) delivery of APEX messages in a convincing manner; (f) assessment of the impact of APEX interventions.

The third set of curricula should focus on innovative and creative training techniques in which the would-be Master Trainers will be trained.

##### Creative, innovative training techniques and materials

Non-traditional, innovative training techniques as well as non-conventional audio-visual training materials, such as educational games, should be developed, which will be used in both indoor and outdoor sessions. The emphasis of training techniques should be stimulation of critical thinking, presentation of original ideas and alternate solutions, and meaningful participation, which could motivate the trainees, enhance learning and make learning fun. The traditional classroom type training should be avoided. Innovative training techniques and materials need to be prepared well in advance of the training session.

##### Multiplier effect and cost-effective training strategy

A core team comprising a small number of agricultural extension supervisors, both male and female, may be selected and provided with adequate training in APEX interventions, and in preparing and using innovative training techniques and materials. Each of these trained people, who may be called Master Trainers, should select and train a certain number of field workers from extension, health, youth, any other relevant field staff, the Rural Opinion Leaders and farmers who will work as resource personnel. Thus a large number of field staff will be trained with relatively little money in a short period.

##### Extension, education and communication (EEC) materials

A variety of colourful, attractive, gender-sensitive and client-focused audio-visual EEC materials, including booklets, posters, charts, pamphlets, video films, audio-cassettes, radio messages and children's comics, should be prepared for the following purposes: (a) for display by the APEX field teams while visiting farmers' groups or attending village events, such as posters, flip-charts, slides; (b) for use by the trainers during training activities, such as flip-charts for explaining various stages of a process such as compost-making; (c) to be left with farmers' groups after discussions, such as recorded technical messages on tape-recorders, small-sized illustrated posters and leaflets; (d) for mass media such as video- and audio-cassettes to be used in television and radio programmes during intensive APEX campaigns.

**In view of the importance of the interrelationships between population trends and food, decision-makers and researchers face the continuing challenge of harmonizing agricultural and population policies and programmes in order to help develop an approach towards achieving universal food security for the benefit of humanity.**

*("Food requirements and population growth"; Paper in Vol. 1 of FAO Technical Background Documents 1-5, prepared for the World Food Summit, Rome, 1996)*

### FIELD ACTIVITIES

Once the target groups of men and women farmers have been organized in the selected villages, members of the APEX field teams trained, and EEC materials prepared, the following field activities, may be initiated in the villages.

#### 1 Strategic message-blending

The most convincing educational thrust of APEX is to present and discuss the messages with the farmers' groups within a context of various farming practices, which is very familiar to them and they can identify themselves with it. The messages on population and environment should, therefore, be blended into agricultural extension messages showing interrelationship between farming practices, population, and environment, for better comprehension and acceptance by farmers. For example, proper spacing between children is as important as spacing between plants, or nutrition for pregnant mothers is as necessary as fertilizer for soil, or keeping the village streets clean is as beneficial as weeding of the field, etc.

#### 2 Group contacts

The APEX field teams should meet farmers' groups and prepare a plan for discussing different topics related to agricultural production, population and environment. A written and/or oral questionnaire should be served to the groups to assess the level of members' knowledge, attitude and practice on the subject. The APEX teams should prepare APEX messages on the basis of this information and should contact the groups according to the mutually agreed schedule, time and location to discuss the messages.



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#### 3 Rural household visits

The APEX field teams should also visit the rural households for discussing APEX topics. These visits should be undertaken especially to reach those women who are unable to join the groups for some reason.

#### 4 APEX knowledge contests

The extension staff should organize APEX knowledge contests in the villages. The participants should be tested on their knowledge of interrelationship between farming, population and environment as conveyed by the APEX field teams. The contests should be held between the male and female teams of the same village, between teams of different villages, between teams of different provinces, and finally a national APEX knowledge contest among the winner teams of all provinces. The winner teams at all contests should receive the main non-cash prize while the non-winner teams should receive non-cash consolation prizes. Adequate publicity should be given to these events, both before and after their organization.

**A number of options can help promote environmentally sound production methods and change land-use practices:**

- J use of indigenous terminology in advice to farmers;
- J organization of workshops to identify constraints and strengthen the flow of information between farmers and administrators;
- J ongoing dialogue with farmers about the use of their land;
- J provision of an adequate operational budget for agricultural education, research and extension;
- J curriculum development to train agricultural extension staff in integrated production systems and in environmentally sound land-use practices.

*("Food production and environmental impact"; Paper in the Vol. 2 of Technical Background Documents 6-11, prepared for the World Food Summit, Rome, 1996)*

#### 5 APEX rural theatre and play contests

Young men and women should be encouraged to organize APEX rural theatres in their respective villages. The purpose of the theatres should be educational, as the plays should deliver messages on the interrelationship between farming, population and environment. The volunteer script-writers, directors, musicians and the cast for the play should come from the villages. The extension staff should organize contests of plays between different villages and provinces, and non-cash prizes should be given to the participating villagers. Adequate publicity should be given to these events, before and after their organization.

#### 6 Targeting decision-makers

While delivering extension messages on any topic, the APEX field teams should identify the persons in the group and the members in rural families who enjoy most influence in decision-making on matters related to that particular topic. These persons should be targeted by the teams. In some cases, only woman members of the team may have to visit the women of the rural household. In general, the APEX field team comprising a male extension worker and a female health worker should visit the groups, along with the Master Trainers.

#### 7 Intensive APEX campaigns

Once or twice a year, depending on human and financial resources available, an intensive APEX campaign should be launched. The campaign should comprise considerably higher number of meetings between farmers and APEX field teams, visits to rural households by the APEX field teams, APEX knowledge contests, plays by the rural theatres, television and radio messages on APEX, and a significantly larger display and distribution of EEC materials in public.

#### 8 Post-awareness educational demonstrations and advice

The APEX field teams should raise and discuss relevant issues at group and rural household level in order to create awareness of the issues, diffuse knowledge, and gain confidence of the men and women farmers. This should be followed by educational demonstrations and technical advice on farming, population planning and environment protection.