

# **AGRICULTURAL POLLUTION CONTROL PROJECT**

## **DESIGN OF PUBLIC AWARENESS PROGRAM**

**ROMANIA**

**AGRICULTURAL POLLUTION CONTROL PROJECT**

**Design of Public Awareness System**

**Table of Contents**

- 1. Introduction: Origin and Objectives of the Assignment**
- 2. Design of public awareness program for Calarasi with institutional responsibilities, procedures for cooperation with local authorities and local leaders and coordination of message delivery with availability of resources**
- 3. Organization of proposed nationwide campaign**
- 4. Staffing needs, investment and recurrent costs for Calarasi and nationwide campaign**
- 5. Implementation recommendations**

## **1. Introduction: Origin and Objectives of the Assignment**

### **Origin of the Assignment**

The Government of Romania (GOR) has obtained an agreement from the Global Environment Facility (GEF) to support an Agricultural Pollution Control Project (APCP).

The Agricultural Pollution Control Project aims to increase significantly the use of environment-friendly agricultural practices in rural areas in order to ultimately reduce the discharge of nutrients and other agricultural pollutants into the Danube River and Black Sea through integrated land and water management. The project is envisaged as a pilot activity in the Calarasi Judet of southern Romania, along the lower Danube. As a first pilot project in Romania to reduce the nutrient load, the activities implemented under the project could be replicated at both local and national level.

A component of this project consists in the preparation and implementation of a public awareness plan to increase understanding of the environmentally-sound agricultural practices and disseminate good agricultural practices for water and soil protection.

### **Objective of the Assignment**

The objective of the assignment is to prepare the draft implementation plan and estimated costs for the public awareness campaigns at Calarasi and national level, in support of and coordination with all the other activities of the Agricultural Pollution Control Project.

The public awareness plan aims to create and increase awareness as well as to induce behavior changes among the local population in regard to agricultural and household practices leading to contamination of their drinking water supplies and the potential of environment-friendly practices demonstrated to produce health, ecological and commercial benefits.

The plan will consider promoting the Code of Good Agricultural Practices used by EU countries according to the CEE Council Directive regarding water protection against pollution with nutrients originated from agriculture - 91/676/CEE (Nitrates Directive).

A secondary but nonetheless important objective is to support and encourage institutional consolidation of agricultural extension services as providers of information and expertise in sound environment agricultural practices.

The foundation for this public awareness campaign is an integrated local/national communications plan. Its effectiveness comes from the synergies created through the use of a wide range of integrated, interdependent communications strategies. Each strategy depends on the impressions and impact of other strategies to create the most cost-effective and communications-efficient way to meet the communications objectives set forth in this plan.

## **2. Design of public awareness program for Calarasi with institutional responsibilities, procedures for cooperation with local authorities and local leaders and coordination of message delivery with availability of resources.**

The public awareness component of the project will be undertaken in the seven pilot communes and will achieve replicability in the whole Calarasi Judet and at national level. The public awareness activities will be delivered through cost-effective, traditional and innovative communication vehicles. The message delivery is coordinated within the project activities timetable with the availability of resources to implement intended improvements. Cooperation with local authorities and other community leaders is essential for an effective campaign to reach the majority of the population in the pilot area. The farmers and other stakeholders will be regularly updated on the progress and benefits of the project activities in order to consolidate the new behavior patterns. The extension service (OJCA) staff will be trained in environment-friendly agricultural practices as well as in communication and information dissemination skills. By participating in the demonstration and field trials they will become a major vehicle for encouraging the adoption of these practices throughout Calarasi.

The development and implementation of this public awareness plan must be framed by a series of guiding principles that insure it effectively achieves the objectives outlined above. These principles include:

- Being structured and able to function so that it provides audiences with the information they need when and where they want it;
- Having pre-established measurement systems incorporated within the plan to evaluate plan performance and all educational efforts;
- Having the inherent flexibility to redirect efforts and resources based on feedback gained from periodic performance measurements and assessments;
- Leveraging the efforts and impact of this public awareness campaign by proactively enabling other organizations and groups to connect to this plan and utilize its concepts and messages in their own communications efforts.

In designing the Calarasi public awareness plan we have used a seven-step procedure, which entails:

- 2.1. Reviewing the realities
- 2.2. Reviewing the existing and potential impacts and influence of key stakeholder groups in Romanian agriculture
- 2.3. Surveying the sociocultural situation
- 2.4. Identifying cognitive and psychological traits of the target audience in regard with the target behavior
- 2.5. Identifying the information needs and habits of each identified group
- 2.6. Constructing the communications
- 2.7. Evaluating the effectiveness

**2.1. Reviewing the realities:  
Review of the status, trend and historical context of agricultural practices in Calarasi, together with their ecological and economic significance**

The first step in designing a public awareness plan is to identify high-priority persuasive goals that meet three criteria: seriousness of the problem, effectiveness of the solution, and suitability of mass persuasion as a way of achieving the solution. The review of the status, trend and historical context of agricultural practices in the selected area is of paramount importance for the identification of the key issues the campaign will address.

**The Pilot Area Description**

- The pilot project area comprises seven comunas in Calarasi Judet, with a total number of 21 villages, covering a compact area of about 74,200 ha with 64,000 ha as arable land, in the southeastern part of Romania.
- The southern part of this area, bordering the lower Danube river, includes the Boianu-Sticleanu polder (approx. 23,000 ha), formerly a floodplain area, drained and transformed into an agricultural polder in the late sixties and now containing large areas of cultivated land, small areas of floodplain forests, degraded lands and Iezer Calarasi waterbody.
- Iezer Calarasi, with a surface of 3,200 ha is proposed to become a nature reserve, being an important corridor for bird migration, most of them listed on Bonn and Bern Conventions.
- Four of the seven comunas selected for this project are considered among the poorest in the country (according to WB's Poverty to Rural Development study).
- The population of these comunas is predominantly aged, with a low level of education, economically relying on their land's work.

**Agricultural practices in Calarasi – ecologic and economic significance**

Project preparation research shows that the selected Calarasi area is characterized by:

- Poor agricultural practices, almost exclusively crop production-oriented;
- Inappropriate management, storage and application of mineral fertilizers, pesticides, manure, and domestic waste;
- Lack of septic tanks in most of the rural settlements;
- Lack of waste water treatment plants for both small human settlements and intensive animal production.

The current practices and realities have severe ecologic and economic consequences such as:

- Soil erosion resulting from unsustainable land use;
- Destruction of the former floodplain areas;
- High groundwater pollution with nitrogen and phosphorous;
- Deforestation and subsequent effects;
- Lack of fish and wildlife food and cover;
- Economic and social difficulties among local communities;
- Lack of recreational opportunities for local people and tourists.

The review of current agricultural practices and their ecologic and economic consequences unveils the key issues that will be tackled by various components of the Agricultural Pollution Control Project.

## Key Issues

Based on the components of the Agricultural Pollution Control Project, a number of 8 key issues have been identified to be addressed by the public awareness plan:

- Pollution
- Water and life quality
- Environment-friendly agricultural practices
- Manure management practices
- Economic and social difficulties among local people
- Unfulfilled potential for tourism
- Community environmental education and awareness
- National policy and regulatory capacity

Further explanation of these issues and desired outcomes of the public awareness plan are presented in the following table:

**Table 1. Key issues and desired outcomes of the public awareness plan**

<b>Key Issue</b>	<b>Desired Outcomes</b>
<p><b>1. Pollution</b> Pollution of water caused by leakage of pollutants into the water system: from non-point sources, from livestock waste, and from human waste</p>	<ul style="list-style-type: none"> <li>• Increased understanding of the problems caused by pollution and waste disposal</li> <li>• Agreed action to reduce levels of pollution</li> <li>• Reduction in nutrient discharge in ground waters</li> <li>• New sources of funds for pollution control and reduction</li> <li>• Replicability of pollution reduction activities</li> <li>• Access to waste disposal technologies</li> </ul>
<p><b>2. Water and life quality</b> Land pollution generates unhealthy drinking water and associated diseases</p>	<ul style="list-style-type: none"> <li>• Better understanding of the relationship between waste disposal and water quality, water quality and health quality</li> <li>• Agreed action to reduce water-contaminating practices at both household and agricultural levels</li> <li>• Improved health hence improved life conditions</li> </ul>
<p><b>3. Environment-friendly agricultural practices</b> Current agricultural practices are exclusively crop-production oriented and are generating soil erosion and deforestation.</p>	<ul style="list-style-type: none"> <li>• Adoption of the environment-friendly agricultural practices chosen for the project</li> <li>• Replication of environment-friendly agricultural practices at national level</li> </ul>
<p><b>4. Manure management practices</b> Current management, storage and application of fertilizers, manure and domestic waste is highly pollutant.</p>	<ul style="list-style-type: none"> <li>• Adoption of manure management practices</li> <li>• Replication of manure management practices at national level</li> </ul>
<p><b>5. Economic and social hardships of local communities</b> The various difficult social and economic hardships of the local people result in high levels of poverty, lack of economic stability and community pride, and lack of basic facilities (clean water, social security,</p>	<ul style="list-style-type: none"> <li>• Increased access to support for sustainable development</li> <li>• Increased understanding for developing income-generating activities</li> <li>• Increased media coverage of poverty-related issues in rural areas</li> <li>• Higher levels of collaboration with NGOs</li> </ul>

transport).	to address socio-economic issues
<p><b>6. Unfulfilled potential for tourism</b> Lack of fish and wildlife food and cover, lack of recreational opportunities for citizens and tourists</p>	<ul style="list-style-type: none"> <li>• Enhanced media coverage and promotion of local potential for tourism</li> <li>• Increased awareness among locals on sustainable tourism</li> <li>• Higher levels of collaboration with NGOs to encourage local eco-tourism activities</li> </ul>
<p><b>7. Community environmental education and awareness</b> Poor coverage of environmental issues in schools, low level of interest for environment in communities</p>	<ul style="list-style-type: none"> <li>• Increased environmental awareness through enhanced school and NGO's participation</li> </ul>
<p><b>8. National policy and regulatory capacity</b> The national strategic goal of accession in the EU calls for a coherent and sustained effort of meeting the EU requirements regarding pollution and agricultural practices.</p>	<ul style="list-style-type: none"> <li>• Increased awareness for the need of enhancing environmental protection legislation</li> <li>• Promotion of the Code of Good Agricultural Practices used by EU countries according to the CEE Council Directive regarding water protection against pollution with nutrients originated from agriculture - 91/676/CEE (Nitrates Directive).</li> </ul>

## **2.2. Review of the existing and potential impacts and influence of key stakeholder groups in Romanian agriculture**

Knowingly or unknowingly, a wide variety of different groups of people have interest in reducing agricultural pollution and thus improving the quality of water, health, and life, or influence them in some way or other. The project preparation research lead to the identification of following stakeholders groups:

### **Key stakeholder groups identification**

- Primary Stakeholders:
  - Local individual farmers
  - Local farming associations
  - Local public officials and community leaders
  - Local community people
- Institutional Stakeholders:
  - Local agencies: OJCAC, DGA, EPA, PHO
  - National authorities: GOR, MWFEF, MAF, MPH, ANCA, Research Institutes, politicians
  - International donors: WB, GEF
- Other Stakeholders:
  - Mass media
  - NGO's
  - Experts
  - International partners

Among these certain key groups are vital to be targeted by the public awareness activities. Priority audience groups are identified according to these criteria:

- The level of direct impact the group has on agricultural practices and pollution;
- The ability of the group to influence the introduction of environment-friendly agricultural practices and pollution reduction, in terms of environment, social, economic, political, or legislation;
- The extent to which the attitudes and behaviors of the group need to change in order to make the project objectives fulfill.

**Table 2. Priority audience groups**

<b>Priority</b>	<b>Target Audience</b>
<b>Critical</b>	<ul style="list-style-type: none"><li>• Local farmers (individual and associations members)</li><li>• Local community people</li><li>• Local authorities (mayors, commune councils)</li><li>• Businesses and investors operating in agriculture</li><li>• National authorities</li></ul>
<b>High</b>	<ul style="list-style-type: none"><li>• Local agencies involved in the project</li><li>• Mass media</li><li>• Children, students, and teachers in the targeted areas</li><li>• Researchers</li><li>• National and international donors</li></ul>
<b>Moderate</b>	<ul style="list-style-type: none"><li>• NGOs</li><li>• Experts</li><li>• Religious groups</li><li>• Local elderly people</li></ul>
<b>Low</b>	<ul style="list-style-type: none"><li>• International partners</li><li>• National level groups</li></ul>

**2.3. Survey the Sociocultural Situation:  
Identification and prioritization of key constraints to environment-  
friendly agricultural practices**

As showed by the baseline household survey, the pilot area is characterized by poverty, poor agricultural practices, aging population and lower levels of education.

There is a number of limiting factors and constraints which will affect the effectiveness of the public awareness plan by limiting the ability of the project to address the key issues identified above:

1. Resource constraints:
  - poverty of most communities targeted by the project
  - farmers lack financial resource to invest in environment-friendly practices that have mutual public benefits, or livestock to produce enough waste for manure management practices
2. Cultural constraints:
  - lack of education and training in environment-friendly agricultural practices
  - lack of responsibility for producing pollution
  - a long-time tradition of agricultural nutrients and unsustainable land use
  - lack of hope in a better future
3. Media constraints:
  - scarcity of local media
  - few newspapers with limited distribution
  - limited interest of local communities in either local or national media, especially in print media
4. Medical constraints:
  - ignorance of water quality problems and their effects on the local population health status
  - current health status and average age of the targeted population
5. Environmental constraints:
  - the desertification potential danger in the targeted area

#### **2.4. Identifying cognitive and psychological traits of the target audience in regard with the target behavior**

In the design of the various persuasion means to be employed, the campaign planner has to take into consideration cognitive and personality psychological traits of the target audience, identifying the thoughts, feelings, and actions associated with the target behavior. Valuable insights have been provided by the socio-cultural household survey as follows:

1. There is a widespread ignorance of notions such as “pollution” or environment”, as the majority of the population in the project area is aged or uneducated.
2. More knowledgeable people think pollution is an urban, industrial phenomenon, very often reduced to the quality of the air.
3. The quality of water is almost never connected to pollution.
4. Very few people believe that the bad quality of water may affect their health. This is also related to the lack of credibility of both local and town physicians.
5. Very few of the interviewed persons make connections between agricultural methods used, the place of the latrines or the ways of storing house and/or animal wastes and the quality of the well water.
6. There is also lack of knowledge of the value of manure as a soil amendment, and about the value of crop residues for erosion control, moisture retention, and weed suppression.
7. However, the level of technical agricultural knowledge and training is higher among the managers of large blocks of land (commercial enterprises and associations with legal status) than among independent farmers or family associations.

Although the household survey has provided initial information, additional research and local sociological and psychological expertise should be sought in the initial phase of public awareness program (message design and target themes teasing) and during the program implementation. Also a benchmark survey should be carried out at national level at the inception of the campaign.

For program design purposes, it is also important to note:

1. People in the targeted areas are not eager to engage themselves in any form of association and the participation in various community activities is dependent of age.
2. The Church, Village Hall and School are the main institutions that have organized/are organizing community activities in the communes. The political parties or other organizations are virtually inexistent from this point of view.
3. Young people in 18-45 age group are most active in such community-based activities. They are also the most open to the issues to be confronted by the current project.
4. In all seven targeted communes there are three opinion leaders that people trust “much” and “very much”: the Priest, the Doctor and the School’s Principal. They should be involved and trained as agents of change in the inter-personal communications activities proposed by the awareness plan.
5. The levels of trust in elected officials (Mayor, commune councilors) are lower, but they tend to increase in the case of mayors who happen to be also heads of the local farming associations. It is the case of the mayors in Independenta and Valcelele who are also the presidents of the largest associations in the respective communes.

The campaign objectives must appeal to values and cost-benefits of individuals rather than abstract collective benefits, and should be reasonable and measurable. Therefore identification of such individual benefits of various stakeholders is important for the message design:

**Benefits of target audiences**

**Locally:**

- At the farm level, additional income from the use of manure as fertilizer, rotations, and improved livestock grazing practices;
- Improvement in health and sanitation as there will be an improvement in the drinking water and general hygiene of the villages;
- Through terrestrial and aquatic habitat enhancement increase populations of birds and fish species of local and social importance.

**Nationally:**

- Improvement of ground and surface waters quality;
- Better maintenance of productive ecosystems and critical natural habitats in the freshwater, estuarine and near shore waters along the Black Sea coast;
- Progress towards compliance with EC Directives;
- Increased agricultural productivity through improved agricultural practices.

**Internationally:**

- Continual reduction of nutrient discharge into Danube River and Black Sea and the accompanying improvements in the local and Black Sea water quality;
- Improving habitat for migratory waterfowl and a variety of endangered species;
- Sequestering carbon in the grasslands, cropland and forests

Note: Long-term prevention objectives seem more difficult to achieve than more immediate campaign benefits, so campaigns aimed at prevention need to link future benefits to present benefits or currently held values.

## **2.5. Identifying the information needs and habits of each identified group**

In order to effectively tease out the target themes it is necessary to identify and understand the information needs and media habits of the relevant audiences.

- **Primary Stakeholders:**
  - Local individual farmers, farmer associations members
    - Environment protection and environment-friendly agriculture awareness
    - Technical training, skills development, I&E program
    - Training and extension to all farmers and farming associations
  - Local public officials and community leaders
    - Environment protection and environment-friendly agriculture awareness
    - Technical training, skills development, I&E program
    - Training in business management, public administration, project management
  - Local communities
    - Environment protection and environment-friendly agriculture awareness training
- **Institutional Stakeholders:**
  - Local: OJCAC, DGA, EPA, Public Health Office
    - Technical training, skills development
    - Training in facilitative leadership and communication skills
  - National: MWFEP, MAF, MPH, ANCA
    - Constant reporting and information on the project progress from PMU
  - International: WB, GEF
    - Constant reporting and information on the project progress from PMU
- **Other Stakeholders:**
  - Mass media, NGOs
    - Environment issues and environment-friendly agriculture awareness training
    - Timely updates on the project progress

The campaign messages must communicate specific information, understandings, and behaviors that are actually accessible, feasible, and culturally acceptable. It also must reach a sufficiently large proportion of the desired audience, but the message must be a product of individuals' needs and must contribute to their own goal.

The necessary data on the information habits of the targeted population in the pilot area is extensively documented by the baseline survey.

## **2.6. Construct the Communications**

### **Design and implementation of cost-effective delivery mechanisms to address these information needs.**

A persuasion campaign is generally built in five stages as follows:

- Exposure – encountering the stimulus and paying attention to it
- Information processing - comprehension of the content, selective perception of source and appeals
- Cognitive learning – knowledge gain and skills acquisition
- The yielding stage – formation or change of affective orientations such as beliefs, salience, values, attitudes, and behavioral intentions
- Final utilization stage – retrieval and proximate motivation, action, post-behavioral consolidation, long-run continuation and maintenance of the practice

The persuasion goals will be put in practice in a coordinated and gradually implemented effort carried out through the following set of actions and activities:

- Impact monitoring activities
- Information and education
- Training
- Media
- PR & Events

Campaigns must make their messages available through a variety of communication channels and vehicles that are accessible and appropriate for the target audience, such as:

- Interpersonal communication, based on pre-existing social, family, religious networks.
- Training sessions in agricultural issues as well as in communication skills for project's designed communicators.
- Booklets, pamphlets and other educational materials.
- Press releases and information packets will be prepared for the national and local press outlining the project's progress.
- To promote awareness of the principles of this project workshops, press conferences and interviews will be organized.
- Production of television spots and radio programs. A documentary film production covering the key steps of the project is recommended.
- An APCP information dissemination center will be established (most probably at OJCA/ANCA locations).
- An Internet Home Page will be established.

Mass media may be effective in creating awareness and providing knowledge, but when it comes to persuasion to produce behavior change, face-to-face channels are essential. Therefore the plan for Calarasi area should be structured with an emphasis on interpersonal communication and training as opposed to mass media use that is more appropriate for the national outreach. A key role will be played by selected communicators who will be equally information providers and agents of persuasion.

We recommend a three-step approach to the public communication strategy and a layering of the message so that the targeted audiences recognize the importance of APCP for the life of their communities, and all agencies involved as credible and expert resources.

Step I: Identifying and training the communicators

Timing: The 1<sup>st</sup> Semester of Y1

This is the pre-launch phase of the awareness plan, when the PMU has to focus on selecting the HR and institutional resources required for the implementation of the awareness plan:

- Communication expert/unit reporting directly to PMU
- Communication agency hired to elaborate messages and media planning

The communication team will further design the campaign themes, key messages, logo and slogan of the campaign, and will plan the actual implementation steps. After the design and planning phase (2-3 months), the communication team should start identifying, contacting and contracting the communicators, with the support of the PMU, and start necessary materials production (1-2 months).

The communicators are:

- At institutional level: OJCA personnel, Fundulea experts, DGA, EPA, PHO staffs
- At community level: agents of influence, such as mayors, heads of farming associations, teachers, doctors, priests

With the help of Romanian and international experts, the communication expert/unit and the agency will develop intensive training sessions in facilitative leadership and communication skills for the designated program communicators. These gatherings will also provide an opportunity to organize focus groups aimed at teasing and refining the campaign themes and messages.

The FORDOC Foundation in Calarasi looks like the ideal location and organizer for these training and brainstorming activities.

Step II: Teasing Campaign and New Skills Learning and Practice

Timing: The 2<sup>nd</sup> Semester of Y1

This introduction will alert the audiences to the fact that a change is coming and will be delivered via community events, organized with the help of top local agents of influence and enhanced by local radio, print and outdoor media. Brochures and handouts will be provided. The teasing campaign will be launched with a press conference in Calarasi, covered by national broadcasting and print media.

Simultaneously, communication training and agricultural skills training and practice for farmers will be implemented according to the APCP timetable. Fundulea Institute as well as OJCA office in Calarasi could compete or complement each other in the farming training project. The FORDOC Foundation in Calarasi will continue to deliver communication training. Printout material will be prepared and the communication expert and agency will provide delivery assistance.

Key messages of the teasing campaign that will be brought forward include:

- What soil and water pollution is and isn't
- Reassure communities that there will be no loss in the household economy and dramatic changes in traditional rural life
- Why the action against soil and water pollution will benefit local communities and farming associations
- How the APCP is responding to communities' needs
- All community people would benefit in this process
- Where people can find information on their new agricultural practices

While the baseline survey suggests that most local people (the aged groups) reaction to change will be slow, the presentation and availability of information is critical to the fulfillment of the PMU and communicators mission.

This requires that sufficient levels of visibility be maintained to provide information and direction on where individual farmers or other publics (audiences) can get the data they

need. Also at this stage, an information dissemination center should be established and advertised. The OJCA office in Calarasi qualifies for such a purpose, according to our research.

Step III: Awareness Campaign

Timing: Y2-Y4

At this point, farmers will have already learned that a change is occurring in how they work the land and manage agricultural and household waste and will have become better educated in regard to the information they will need to adopt new behaviors. The campaign will emphasize that communities have more benefits by adopting new practices, will encourage local people to engage in community effort and will highlight that their involvement has implications and long-term effects. During this phase the topics addressed will include:

- How changes in the agricultural practices will affect their lives and households
- How communities will make progress in the poverty alleviation
- That their actions have implications
- And that there are places they can turn to find out more information

Every year-end, the campaign will be monitored based on the research measures detailed in Section 2.7., Evaluating the Effectiveness, and will be adjusted to ensure effectiveness as necessary. Y5 will be dedicated to overall awareness plan evaluation and replication at national level.

#### Media Plan And Selection

The following media are recommended for use:

Radio – national radio (programs for farmers) and local FM

Newspaper – national and local to less extent

Local Cable Television - urban reach

National Public Television – weekly farming programs

#### Media Goals

Teasing Campaign - Reach 60% of the pilot area population, adults age 18+ at least 2 times per week.

Awareness Campaign - Reach 50-60% of the pilot area population, adults age 18+ at least 1 time per week.

#### Media Strategies

- Use national and local radio to promote the main themes of the campaign, the communicators, and the progress of the project.
- Develop a partnership with national television Romania 1, “Viata Satelor” program and TVR2, “Ferma” program for the development of three 60-minute specials to air (1) during Y2 phase and (2) to be followed-up during subsequent 2 years. One additional special is recommended for the end of the campaign (Y5).
- Use newspapers for reports on the project progress and interviews with key players. Although they have minimal rural outreach, they are useful for keeping

informed and active other constituencies from the urban area (county officials, specialized agencies, relatives of the rural people).

- Use cable television for similar purposes.

#### Printout & Collateral Materials

Providing Calarasi communities with the ability to understand and benefit from changing their agricultural and household habits requires communicating a significant amount of new information such as terms, definitions and many new concepts simultaneously with applying newly adopted practices. To be of value, this information needs to be in a permanent format, one that enables consumers to retain it and refer to it when they need the information and want to utilize it. All of this requires the public education plan to make significant use of print collateral materials throughout the campaign. A manual for Graphic Elements & Program Identity should be elaborated by the media agency.

All communications pieces will be developed for multiple purposes and for varying audiences, and all materials will point to sources for additional information such as the answer center and the web site. Materials will be available in large type and the television programming will be closed-captioned. Additionally, the answer center will be voice and TDD equipped. Specific materials will be developed keeping in mind a lower than average literacy level, as well as regional specificity.

While the public education campaign is utilizing media to create awareness, the print collateral materials, in conjunction with the public relations activities, will be the actual mechanisms through which information and public education will be delivered.

Printed materials will be used in three primary forms:

- Materials that will be distributed to selected participants in various training activities;
- Materials that will be distributed to each household and association in the pilot area;
- Other printed collateral materials that will form the basis for information packages used in a wide range of applications with all target audiences.

#### Collateral Materials To Be Utilized

Below is a list of the promotion materials this campaign will produce and utilize:

- Stationery system letterhead, second sheet and envelope
- Pollution - An introduction to pollution caused by agricultural practices
- How household waste can harm you and your family
- Environment-Friendly Agricultural Practices - Terms & Definitions
- Manure Management – Uses and Benefits
- Yearly calendars with appropriate pictures and messages related to sound land exploitation practices
- Frequently Asked Questions (one for individual farmers/one for agricultural associations managers)
- Newsletter (quarterly)
- Posters (series of three)
- Reprints/copies of articles, op-ed pieces
- Multi-purpose die-cut presentation folder

- Information Kits
- Legislative information kit
- Press kit
- Written Presentations (2 - 3) With Slides
- Ad-imprinted buckets and tools
- Web Page
- Educational Video
- Audio Tapes

## **2.7. Evaluating the Effectiveness**

### **Campaign evaluations: initial, mid-, and post-campaign evaluations.**

Evaluation research seeks to answer questions about the target audience, including collection of background information about audience orientations before initiating the campaign, and assessment of the implementation and effectiveness during and after the campaign.

Formative evaluation of specific campaign objectives and media messages is crucial to developing effective campaigns as it provides data and perspectives to improve messages during the course of creation.

Measurement of the public awareness program's effectiveness is critical in insuring that the overall objectives are achieved.

The plan will employ four fundamental forms of measurement and assessment:

- Quantitative follow-up surveys
- Media/environmental analysis through Quantitative Issues Analysis
- Follow-up Focus Groups
- Analysis of contacts from the answer center and web site

Same pattern of measurement and evaluation should be replicated at national level.

### **Quantitative Follow-Up Surveys**

Follow-up evaluation surveys will provide data, which can be used to identify the level of public awareness and understanding of the public awareness plan. The results of the follow-up surveys will be compared systematically with data gathered in the benchmark survey (a selection of the Calarasi baseline household survey) administered in 2000 and the first pre-campaign follow-up survey to be administered on the outset of the awareness program.

The purpose of the follow-up surveys is two-fold:

- To provide regular feedback about exposure to, and the effectiveness of the public awareness campaign; and
- To provide timely information for making any mid-course corrections in the public awareness campaign.

### **Content**

The follow-up evaluation surveys will include items to evaluate the following four measures of effectiveness:

Exposure to the Campaign - This part of the measurement process will assess unaided awareness of the public awareness program, as well as provide aided awareness and analysis of communications channels and specific campaign messages.

Increased awareness - The follow-up surveys will systematically evaluate changes in public awareness based upon exposure to the campaign. The level of public interest will also be measured, with results again compared to the benchmark survey.

Increased public understanding - Increasing public understanding of the problems raised by pollution is a primary goal of the public education effort. A composite index based upon responses to the ten true/false questions in the benchmark survey will be used to measure understanding, with variations in this index in the follow-up being the measure of effectiveness.

Adoption of new skills and behavior change - Adoption of new skills and behavior change also provide a critical measurement of the plan's effectiveness. Behavior change will be measured through a series of new questions that will examine: conscious choices made by farmers regarding their choice of agricultural practices; farmers' knowledge of where to look for additional information about environment-friendly agricultural practices, manure management.

Details of Performance indicators to be measured are given in table 3.

#### Mid-Course Corrections

In addition to the standardized template of questions used to measure exposure, awareness, understanding and empowerment, each follow-up survey will include up to 5-10 customized questions to address any new or any time-sensitive issues which could develop during the course of the campaign. The results of these questions will provide an opportunity to make any mid-course corrections in the campaign based on new information.

#### Validity and Reliability of the Follow-up Evaluation

Reliability of the follow-up evaluation will be based on the use of a consistent sample design and the use of identical questions.

The sample design will replicate the one used in the benchmark survey. Each follow-up survey will be based on complete responses from 400 persons in the pilot area/national level. A screening question will be used to ensure that the results are based on responses from a household decision maker. Respondents will be selected using random election lists sampling to ensure a probabilistic sample of consumers. The final sample of 400 respondents will have a maximum margin of error of +/- 5.0 percent. The methodology will be consistent to ensure that the results can be used to make systematic comparisons over time.

Each item on the original benchmark survey was pre-tested for accuracy and face validity. All questions for the follow-up surveys will also be pre-tested for accuracy prior to full administration.

#### Timetable

The following is a recommended schedule for administering the follow-up evaluation surveys to be conducted in support of the public awareness plan. Press releases will be issued after the completion of the follow-up surveys.

Follow-up survey #1: Pre-campaign examination of public awareness	Onset of Y1 N=400
The pre-campaign survey is essential to ensure that the pre- and post- measures of campaign effectiveness do not inadvertently measure any intervening changes in public awareness and understanding between the time of the benchmark survey conducted in the fall of 2000 and the introduction of the campaign.	
Follow-up survey #2: 6 months evaluation period	Onset of Y2 N = 400
Follow-up survey #3: 12 months evaluation period	Onset of Y3 N = 400
Follow-up survey # 4: 12 months evaluation period	Onset of Y4 N = 400
Post-campaign survey	Y5

**Media/Environmental Analysis Through Quantitative Issues Analysis (QIA)**

Quantitative Issues Analysis (QIA) provides a tool to understand, track and measure the other voices that are impacting the public's understanding of agricultural pollution problems. This process tracks all print media mentions on topics related to pollution, water and soil quality, and agricultural practices, and measures the volume of impressions being presented to target audiences in the national phase of the campaign.

**Content**

QIA will assess and quantify all impressions delivered to our target audiences on the following:

- By a range of topics that relate to the key issues of the program;
- Impressions delivered by the public awareness program as opposed to those delivered by authorities, energy service providers, and other key voices;
- Impressions delivered by publication;
- Impressions by source (advertising, editorials, articles, earned media, etc.);
- Accuracy of each media impression regarding electric competition and whether these impressions are adding clarity to public awareness and understanding of this issue.

All of this data will be entered into a database that will allow for a wide range of analysis that will enable:

- A complete picture of impressions being delivered nationwide on this issue to be created;
- Provide quantitative assessment as to the effectiveness of the earned media portion of this plan;
- Enable trends in impressions to be identified and managed before they impact awareness and understanding.

**Timetable**

Media information is collected daily, and reports will be presented monthly to the PMU. The QIA process is currently designed and in place, and is scheduled to begin on the onset of the program.

**Follow-Up Focus Groups**

Focus groups will be used to further define and understand issues uncovered through the follow-up surveys as well as to refine campaign messages. These focus groups will be formatted and scheduled after analyzing the results of each survey.

**Analysis Of Contacts Through The Answer Center & Web Page**

As discussed earlier, phone contacts and hits on the web site offer significant opportunities to understand areas of public concern and interest. Each of these contact centers will be structured to capture this data so that it can be added to a growing picture of how the Romanian public is responding to agricultural pollution and related issues in general, and the public awareness program specifically.

**Timetable**

Contact data will be collected monthly and presented in conjunction with the QIA findings.

### 3. Organization of proposed nationwide campaign.

A broad nationwide public information campaign will disseminate the benefits of proposed project activities. Information will be delivered through the public broadcasting institutions, including a regular supply of information to the mass media on the progress of the project. This approach will build a general goodwill for the project and its benefits, and will raise the interest of potential future clients. The demonstrations and on-farm trials in the project will be used as a practical laboratory for training agricultural extension and environmental personnel from elsewhere in Romania. Activities will, in part, be selected for piloting based on their broader applicability to agriculture in the Danube Plain and other regions in Romania.

To achieve the objectives described above, this public awareness plan is based on the following strategies:

1. Initiate the public education effort in advance of the introduction of environment-friendly agricultural practices and increase awareness nationwide;
2. Divide the campaign into two components:  
An initial short-term phase designed to create program awareness and introduce the public education effort;  
A long-term phase that encompasses all educational activities.
3. Utilize public relations activities as a fundamental communications process to create awareness and understanding with all influential audiences (media, community-based organizations, opinion leaders, etc.)
4. Lead paid advertising and the distribution of all collateral materials;
5. Act as the primary response mechanism to address and clarify issues that may arise during the campaign.
6. Create and sustain program awareness using paid advertising. After a heavy introductory period, paid advertising will only be used at key points during the campaign to maintain public awareness and direct targeted audiences to other resources;
7. Collateral materials, delivered through a variety of distribution methods, will carry the primary "inform and educate" messages;
8. Primary distribution methods will be freestanding inserts in newspapers and bill inserts in utility bills;
9. All materials will "point" farmers and other stakeholders to additional sources of information;
10. All materials will be developed for use with different audiences at different points in time.
11. Employ a centralized response and information resource that national stakeholders can turn to at any time over the life of the campaign:
  - Use a toll-free answer center located at ANCA center;
  - Enhance the program's existing web site;
  - Have every communication vehicle "point" to these centralized response and information resources.
12. Extend the reach and impact of this awareness plan by engaging governmental agencies and as many community-based organizations as possible in the distribution of information and in the process of educating consumers;
13. Engage local agricultural businesses, farming service providers, and aggregators in distributing public education information to primary stakeholders;
14. Ensure that all communications are relevant, clear and easy to understand.

### **Public Relations/Earned Media Strategies**

In undertaking a major component such as the public relations (earned media) strategy, it is important to remember two items:

- The little things are just as important as the big things;
- Always begin at the beginning.

In this vein, the tactical plan for earned media is designed to cover all potential issues and questions, both large and small, that the public and media reporters/editors will need to have answered. In this public awareness campaign, there will be no such thing as an "unnecessary question."

Extensive conversations with various media organizations and journalists have already taken place with each group having represented and reinforced the need for its own education on this issue prior to being able to report effectively on the issue, on the background of an increasing interest and coverage of pollution-related issues lately.

Thus, the earned media activities should begin at the beginning by educating the media. The Center for Independent Journalism in Bucharest expressed willingness to host and co-sponsor training in environmental journalism as well as other activities. Further, a comprehensive series of press releases, op-eds, feature stories and meetings with the public will be developed and executed leading up to support the campaign promotion.

### **Coalition Building - The Power Of Partnerships**

One of the guiding principles of the public awareness plan is leveraging or extending the efforts and impact of this public education effort by proactively enabling other entities to connect to this plan and utilize its concepts and messages in their communications efforts. This is an essential strategy of the campaign, as the interests and efforts of others can naturally extend the impact and overall effectiveness of the plan.

Several entities become natural partners in extending this plan, given their involvement in the water and soil pollution issue, and their interest in presenting their point of view on this subject.

These include: MWFEP, Ministry of Education, scientific and research institutes, national and international environmental organizations, tourism organizations, WB, etc.

#### **4. Staffing needs, investment and recurrent costs detailed for Calarasi and nationwide campaign**

The project requires hiring full time a local communication officer/unit who will serve as a chief of project reporting to PMU and as a liaison between various stakeholders involved in the project.

At the same time a professional PR and media agency with a proven record in undertaking public awareness campaigns in Romania will be selected. Its tasks include message design, campaign planning and integration of Calarasi pilot and national plan, media planning and monitoring, evaluation, production.

The PMU should offer internships locally and nationally for students willing to assist in program development and implementation.

The staff and operation of the OJCA consultation center (at Calarasi level) and ANCA (at national level) will be integrated with the answer center for efficiency and economy;

Management - both the answer center and consultation center will be managed by the same supervisor, who should be the communication officer hired as chief of project;

Hardware Systems and Facilities - both centers will be run in the same facility, and share the same phone, computer and literature fulfillment systems;

Staff - The answer center's staff will also act as project consultants, ensuring consistency in communication and efficient use of staff. In addition, an element of cross training will encourage the application of knowledge from one situation to the other;

Materials and Resources - There is a natural overlap of collateral materials and resources which, if housed centrally, will best serve stakeholders regardless of their entry method in the program, either OJCA/ANCA channels or the answer center.

The resulting efficiencies and synergies will deliver a better overall educational product to all stakeholders who may initiate contact with the answer center (OJCA/ANCA).

Over time, counselors may develop areas of specialty among the issues tackled by the APCP. Or counselors may be drawn from an existing organization already familiar with an audience's needs. It may be cost-effective to bid and contract out pieces of the consultation center to organizations that have existing systems for communication and distribution. Examples of organizations that have such systems already established are the FORDOC, the County Council, .

Further research will be conducted to bid and allocate pieces of the Center effectively.

## 6. Implementation Recommendations

Effectively launching this integrated public awareness plan requires careful preparation and implementation. The overall project schedule included in this plan provides an overview of how all of the different tactics work together to achieve the plan's objectives. From this schedule come several critical considerations:

1. This plan provides recommendations for an on-going communications campaign that will begin and develop simultaneously with the other activities planned in the APCP. This is an optimal schedule, which has been built around an assumed 5-year long campaign. In addition, this plan, with minimal modification, is designed to accommodate other campaign durations;
2. Please note the production times needed to prepare all of the different components of this plan - the six months production period outlined is absolutely essential. These time frames represent a highly compressed, aggressive production schedule. As this is an integrated communications plan, it means that all of the tactics at both Calarasi and national level are designed to work together to provide the desired results.
3. The introduction of the public awareness program in Calarasi and the coverage/impact of this event in national media should create a significant impact on other communities confronted with similar problems in areas along the Danube. This plan is designed precisely to manage this impact. Messaging to national audiences would begin approximately the same time Calarasi-based messages will be speaking, effectively working to reduce possible confusion. In addition, the web site and the answer center should be operational within a year from the starting date to further clarify any confusion that may exist due to Calarasi-based messaging;
4. As discussed in this plan, any phased introduction will dramatically impact this plan, from both a cost and scheduling standpoint. A phased rollout has the potential of reducing the potential for this to work in an integrated fashion as it is currently designed. In a phased introduction, individual tactics will have to work more in a stand-alone fashion, in many cases being repeated in different parts of the country at different times, which may require a higher level of investment to get the same results.
5. Given the undetermined amount of time between the design of this plan and its actual implementation, the following recommendations outline initial steps that must be completed prior to implementation for the plan to begin successfully:
  - Reassess stakeholders awareness (see Section 2.7., Evaluating the Effectiveness);
  - National benchmark survey planning to determine overall awareness at national level;
  - Review all recommended strategies and tactics based on: updated research and social conditions, actual starting date, approved campaign budget;
  - Revise and re-prioritize recommended strategies and tactics;
  - Update and revise overall timetable;
  - Begin production and implementation.

## Implications

When the project is approved and the starting date is known, the PMU will need to begin work on the implementation of this plan immediately.

This, in turn, will put additional pressure on those policy issues that remain to be defined, specifically campaign format and content, project bidding, personnel and institutional issues, financing of the public awareness campaign, etc.