



DFID Natural Resources Systems Programme

NPA TOOL-KIT VOLUME I

National Plan of Action (NPA) Guidelines

Development Implementation and
Monitoring & Evaluation of a NPA
for Agrochemical management in
the Caribbean



CGPC

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ACRONYMS

| | |
|-------|---|
| CAMP | Caribbean Agro-chemical Management Project |
| CBO | Community Based Organisation |
| CEHI | Caribbean Environmental Health Institute |
| CGPC | Coordinating Group of Pesticide Control Boards of the Caribbean |
| DFID | UK Department for International Development |
| LWI | Land-Water Interface |
| MRAG | Marine Resources Assessment Group |
| NCC | National Coordinating Committee |
| NGO | Non Governmental Organisation |
| NPA | National Plan of Action |
| NRSP | Natural Resources Systems Programme |
| PCA | Pesticides Control Authority |
| PCB | Pesticides Control Board |
| RPOA | CGPC Regional Plan of Action |
| SMART | Specific, Measurable, Attainable, Realistic & Time-Bound |
| TOR | Terms of Reference |

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1. INTRODUCTION

1. INTRODUCTION: NATIONAL PLAN OF ACTION FOR AGROCHEMICAL MANAGEMENT

1.1. *Introduction*

This document and supporting materials form a National Plan of Action (NPA) 'Tool-Kit', designed to aid in the development of a NPA for improved agro-chemical use and management. Materials contributing to the Tool Kit were derived from a number of sources, including previous DFID NRSP funded research. The Tool Kit consists of:

- **Volume I:** Guidelines for the Development, Implementation and Monitoring & Evaluation of a National Plan of Action for Agrochemical management in the Caribbean;
- **Volume II:** Annexes to the guidelines providing more detailed comments
- **CD Rom** consisting of a range of resources including relevant report and documents from Annex 3 & 4 of Volume II.

This document is **Volume I** of the Tool Kit and has the following sections:

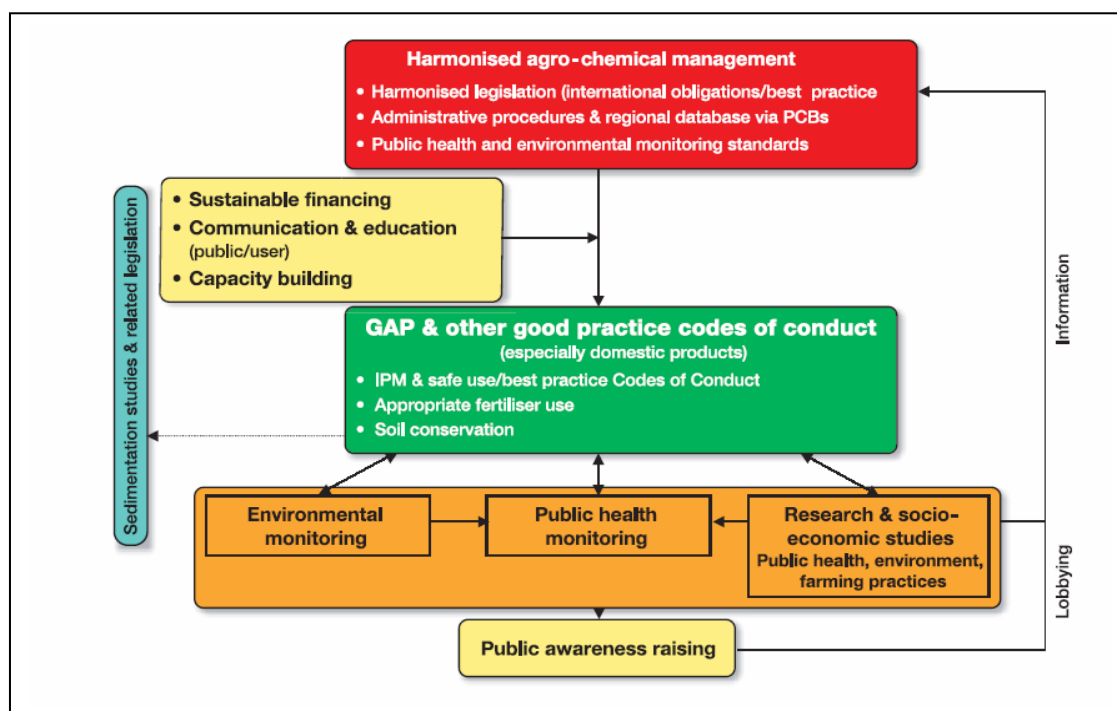
- Introduction
- Preparation
- Development
- Implementation
- Monitoring & Evaluation

1.2. *Background*

This guidance document provides a step-by-step approach for developing a National Plan of Action (NPA) for improved agrochemical use and management in the Caribbean. It has been developed to support implementation of the Coordinating Group of Pesticide Control Boards of the Caribbean (CGPC) Strategy for improved agrochemical use and management for the wider Caribbean.

The CGPC Strategy for improved agrochemical management in the wider Caribbean was developed and endorsed by the CGPC in June 2003 during its 8th Annual Meeting. It was based on findings from a 3-year research project (2000-2003) that analyzed the present management and impacts of agro-chemicals on public and environmental health. The research focused on two case study countries: St Lucia and Jamaica but the resulting strategy achieved wide applicability through the coordination of the CGPC (**Figure 1-1**).

Figure 1-1 The CGPC Strategy for Improved Agrochemical Management in the Wider Caribbean



Regional and National level plans of action are required to implement the Strategy. These can prioritise and take forward key recommendations. A Regional Plan of Action (RPA) was developed during the 9th CGPC (2004) Annual Meeting and is summarized in Box 1-1. See Annex C-2 for details. Jamaica has begun to develop a National Plan of Action and St Lucia has also begun discussions to take an NPA forward.

Box 1-1 Content of the CGPC Regional Plan of Action (RPA)

- The Regional Plan of Action includes the development of priority proposals for the following issues:
1. **Good agricultural practices:** to achieve GAP certification for CARICOM countries
 2. **Sustainable financing of the CGPC Strategy:** to ensure the strategy can be sustainably implemented at regional and national levels
 3. **Institutional arrangements:** to review and recommend the most effective arrangements to assist with national and regional implementation of the strategy.
 4. **Regional Database:** to store and share information on agro-chemical registration, toxicity, and impacts.
 5. **Change management and communications:** to assist with the educational and training requirements of implementing the strategy
 6. **Research Strategy:** to develop a monitoring programme for the impacts of agro-chemicals on public health and the environment.

1.3. Using this Tool Kit

1.3.1. What is the Aim of the Tool Kit?

The Tool Kit has been prepared as a guide for those considering or working on a national plan of action for the promotion of Improved Agrochemical Management. It provides information and guidelines, together with selected examples that will assist the reader in the NPA process.

The main aims of this Tool Kit are to:

- Help maintain the momentum to implement the CGPC Strategy for Improved Agrochemical Management in the Caribbean;
- Provide guidance on the national response to the Strategy;
- Outline a step-by-step approach for developing, implementing, monitoring and evaluating the impacts of a National Plans of Action (NPAs) for Agrochemical Management in the Caribbean region.

The Tool Kit is designed to provide guidance but not to be narrowly prescriptive. It is recognised that each country has the responsibility for choosing for itself the path it will follow in pursuit of its goal of Improved Agrochemical Management, consistent with the commitments it has made at the national, regional and international levels.

1.3.2. Who is this Tool Kit for?

This Tool Kit has been prepared to assist people and institutions working on, or interested in, developing a national plan of action for improved agrochemical management. It will be useful to both public and private sectors at the national, regional and international levels.

Stakeholders interested in the Tool Kit will include:

- Pesticide Control Boards;
- CGPC members;
- Institutions involved in agrochemical manufacturing, importing, exporting, regulating, sale, use and disposal;
- Regulatory and environmental and health protection agencies;
- Development and funding agencies;
- Planning agencies;
- Judiciary;
- Academic and Research Institutes;
- Civil Society groups.

Categories of audiences are summarised in Table 1-1.

Table 1-1 Categories of Tool Kit users

| Uses | Activity | Tool Kit assistance |
|-----------|---|--|
| Planning | Working on the development of a new national plan of action. | The Tool Kit will inform them of the principles and processes involved. |
| Revision | Governments and civil society in countries where a national plan action has already been developed | The Tool Kit will provide additional information on the concept and implementation of a national plan action. It may also , guide further implementation and continuous improvement. |
| Financing | Governments and private institutions that wish to provide funds for technical assistance programmes in the field of Agrochemical Management | NPA development as result of the Tool Kit's guidance will contain numerous proposals for activities that could be supported by development partners and the private sector. |

1.4. What is a National Plan of Action for Agrochemical Management?

A National Plan of Action for Agrochemical Management (NPA) is a strategic management tool that can assist governments, industry and local communities in the prioritization of activities and in the mobilization of both political and financial support.

A National Plan of Action is particularly useful when action involves a broad range of groups and individuals who represent divergent interests and perspectives. Agrochemical impacts and threats to both human health and the environment can be complex and are likely to require long-term, cross-sectoral, multi-disciplinary, and broadly participatory responses.

A National Plan of Action is therefore especially useful for agrochemical management, and can be used as a planning tool to co-ordinate multi-sectoral activities.

A well-prepared NPA outlines the specific goal and objectives to be achieved, related activities to be undertaken, associated responsibilities of the participants, a time frame, resources and evaluation details.

1.5. *What is the purpose of a National Plan of Action for Agrochemical Management?*

There are three main aims of a NPA for agro-chemical management. These are:

- **To heighten awareness** and understanding of the value and benefits of improved agrochemical management and use, and vulnerability of human health and the environment from poor agrochemical management.
- **To identify and implement actions** to address specific causes of negative impacts and threats on human health and the environment from agrochemical use and management;
- **To mobilize resources** and partners, including the private sector, for implementation of specific projects to address the negative impacts and threats on human health and the environment from agrochemical use and management.

Box 1-2 Some examples of the value of NPAs

- Ratification of additional international standards and more effective incorporation of these standards in domestic law and practice;
- Improved practices on the part of those responsible for agrochemical management;
- Better awareness and implementation of activities, leading to an improved quality of life and the protection of the environment as a result of improved agrochemical management and practices;
- Improved linkage between different sectors that may have an interest in agriculture and development;
- Establishment or strengthening of national agrochemical management institutions;
- More effective civil society institutions;
- Enhanced programmes for vulnerable groups.

1.6. *Guiding Principles of a National Plan of Action*

There are some general principles that apply to all national plans of action:

Content

The plan should:

- incorporate a commitment to improved agrochemical management and set out how this could be effectively implemented;
- be comprehensive in scope, reflecting the interdependence and indivisibility of agrochemical management;
- be action-oriented;
- be selective in the planning phase and focused on a few specific strategies appropriate for the country, rather than addressing all possible strategies. In particular, for those countries with limited resources, an incremental approach to the development of a NPA is considered more realistic and effective (start small and increase gradually);
- Adequate, timely, and sustainable budgets originating from diverse sources are crucial in implementing a NPA;
- have international dimensions.

Process

- Process and outcome are equally important
- Continued high-level political commitment is needed throughout the development and implementation phases. This includes having an influential agency or ministry

to lead the process for developing the NPA. It also requires a high profile patron such as the Prime Minister or other Minister to promote the NPA.

- An intersectoral coordinating committee is important to put the NPA into practice. Members of such a committee must participate regularly in meetings and have authority to delegate appropriate activities in their sectors.
- Effective monitoring and review of implementation is essential.
- The NPA process should be continuous. The conclusion of one component of the plan will lead to the commencement of another.

Participation

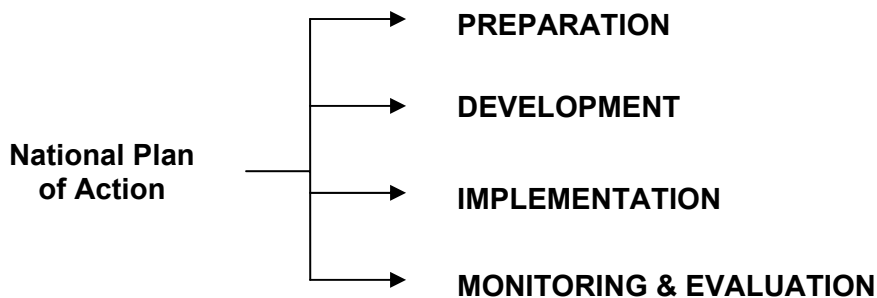
- There should be a broad and intensive consultation process with civil society and the general public.

Transparency

- The plan should be a public document.

1.7. What are the Stages in Developing a National Plan of Action for Agrochemical Management?

There are four main stages in developing a National Plan of Action for Agrochemical Management:



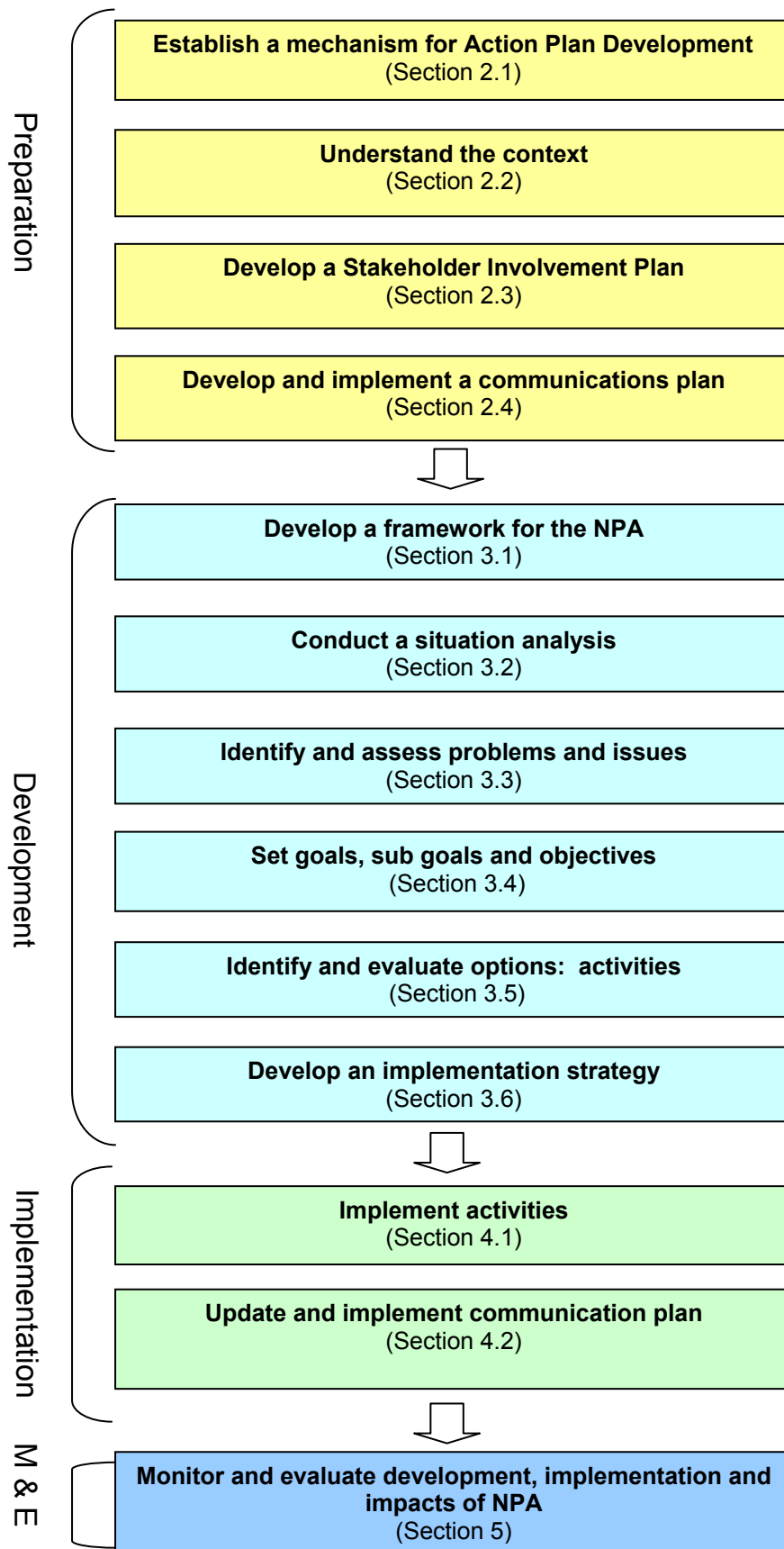
An overview of the process is given overleaf in Figure 1-2, with references to the relevant sections within this document.

This is a flexible framework that can be adapted to the specific circumstances of each country. Although all the steps need to be addressed, the whole process must be iterative, and build on existing assessments, data and lessons learnt, as activities are developed and implemented. It will also need to be mainstreamed into relevant national policy, institutional and budgetary frameworks.

In addition to a step-by-step approach, the process requires supporting structures such as:

- Organizational arrangements to coordinate among sectors and sectoral institutions;
- Legal and enforcement mechanisms;
- Financial mechanisms;
- Means of identifying and pursuing research and monitoring requirements in support of the programme;
- Contingency planning;
- Human resources development and education;
- Public participation and awareness.

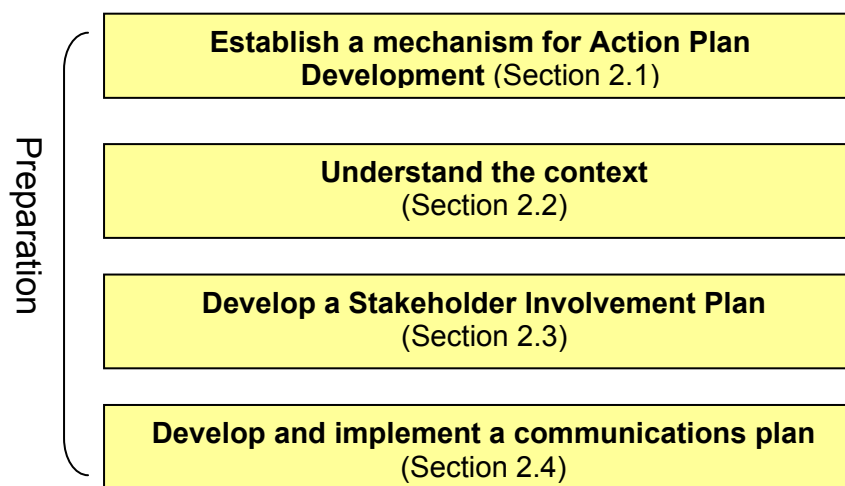
Figure 1-2 An Overview of the NPA Process



2. PREPARATION

2. PREPARATORY PHASE OF THE NPA

The Preparatory phase of the NPA is the first phase in developing a NPA and requires the following steps:



2.1. *Establish a Mechanism for Action Plan Development*

The development of a NPA is likely to be initiated by a lead ministry or government agency with responsibility or concern for improved agrochemical management. This may be the Pesticides Control Board/Pesticide Control Authority (PCB/PCA). It will also require working in partnership with other government agencies, private sector organizations, non-governmental organizations and community-based organizations.

A mechanism for action plan development is required to:

- Coordinate stakeholder involvement;
- Provide clarity on the process of NPA development;
- Acquire credibility for the NPA process.

The steps required for defining and establishing a mechanism for NPA development are summarized below.

2.1.1. Understand country-specific mechanisms

It is first useful to address questions related to the general procedures for developing national plans of action to help identify the best approach in this case. Questions include:

- How have other National Plans of Action been established?
- What are the decision-making arrangements for strategies and plans within different ministries?
- Who develops and controls budgets for different government Ministries?
- Who will need to endorse a National Plan of Action?

2.1.2. Determine who should initiate the process

The government and/or its designated agency will have a central role to play in the development of the NPA, and the stimulus may originate at the highest level of government or at the working level, as part of the policy-making process. However, the private sector and civil society have key contributions to make and can initiate the process by calling on the government to take action.

2.1.3. Establish a lead agency to function as the Secretariat of the NPA

It is important that a specific agency of government is identified early in the process as the lead agency for action, and overall coordinator. The lead agency may be more or less self-selecting (e.g. PCB/PCA). This agency can also function as the Secretariat for the National Coordinating Committee.

2.1.4. Establish a National Coordinating Committee to manage the development and implementation of the NPA

The lead agency or coordinator can be supported by a National Coordinating Committee (NCC) (or Task force).

The NCC can be either executive or advisory and should be comprised of members from all concerned agencies including academia, NGOs, CBOs and the private sector. The success of the NCC will depend on members participating regularly in meetings and having the authority to delegate appropriate activities in their sectors.

Suggested members of the NCC are provided in Box 2-1. The selection of members for the NCC should be based on the outcomes from Section 2.3: Developing a Stakeholder Involvement Plan.

Box 2-1 Potential Members of the National Coordinating Committee

Potential Members of the National Coordinating Committee

- 1 Pesticides Control Boards/Authorities
- 2 Ministries concerned with, or who have a role in the management of chemicals and agrochemicals, including Ministries of Agriculture, Customs, Environment, Education, Finance, Foreign Affairs, Health, Industry, Justice, Labour, Planning, Tourism and Transportation
- 3 Representatives of Agrochemicals Manufacturers, Importers and Exporters
- 4 Representatives of Chemicals and Agrochemicals Distributors, Wholesalers and Retailers
- 5 Representatives of Farmers Associations, Chamber of Commerce, Manufacturers, and Business including Hotel and Tourism
- 6 Representatives of Consumers Groups
- 7 Representatives from Labour
- 8 Representatives from NGOs and CBOs
- 9 Water Utilities
- 10 Representatives from Academia
- 11 Representatives from National, Regional and International Development and Donor Organizations
- 12 Other governmental entities which may play an initiating role include central agencies or councils responsible for the development and implementation of laws, regulations, policies and activities related to management of chemicals throughout their life cycle, and/or aspects of pollution prevention and control.

The NCC should have clearly defined Terms of Reference (TORs) and agreed functions (Box 2-2 and Box 2-3).

Box 2-2 Suggested Terms of Reference of the NCC

Suggested Terms of Reference:

1. Brief Introduction and Background of the Initiative
2. Functions of the National Coordinating Committee of the NPA
3. Organisational Structure
4. Responsibilities of Members of the Coordinating Committee
5. Operating Procedures
6. Management of the Preparatory Phase
7. Management of the Development Phase
8. Role of the Chairperson
9. Composition, size and functions of the National Coordinating Committee
10. Functioning of sub-committee
11. Timeframe and resources for the operations of the Coordinating Committee
12. Memoranda of Understanding/Letters of Engagement for Coordinating Committee Members

Box 2-3 Suggested functions of the NCC

The main functions should include:

- To conceptualize the NPA as a synthesis of international, regional and national standards, national law and local circumstances, including the Regional Strategy for Improved Agrochemical Management;
- To conduct a baseline study to establish the national agrochemical management context;
- To collate relevant existing information such as government agency studies and reports, and reports by national, regional and international institutions, and NGOs;
- To take into account existing action plans, including development plans;
- To formulate the draft NPA by identifying objectives, strategies, components, priorities, vulnerable groups, programmes and activities, monitoring, evaluation and revision within clear time frames;
- To organize consultative forums/public meetings to assess responses and then to revise and finalize the NPA, taking into account the input received;
- To submit the plan for approval at the highest levels of government;
- To disseminate the adopted NPA to all actors concerned for implementation and integration into their respective policies and plans of action;
- To develop and implement a media strategy, including the public dissemination of relevant materials, in order to bring all stakeholders into the process and to facilitate awareness of the plan among the general public;
- To monitor and facilitate evaluation of the NPA;
- To report as appropriate, including perhaps to the public, the government or the parliament.

2.1.5. Issue Memoranda of Understanding for Coordinating Committee Members

Memoranda of Understanding for NCC members will formalize their involvement in the National Coordinating Committee. These MoUs should be signed at the highest possible level between the Committee Member's organization and the line ministry that is responsible for the NPA.

2.1.6. Establish a system of consultation on the NPA

Transparency is an important part of a good consultation system and key documents such as the draft National Plan of Action and meeting minutes of the NCC should be publicly available.

Mechanisms for consultation include:

- NCC meetings
- Wider stakeholder meetings
- Telecommunication contacts among the main players to promote better cooperation and a harmonious atmosphere for collaboration
- Sectoral Working Committees
- Interactive web site
- Public meetings
- Public hearings

- Provision for written submissions
- Radio and Television talk and calling programmes

This process of consultation should continue throughout the implementation phase as well (See Section 4).

2.2. Understand the Context of the National Plan of Action

Understanding the context is one of the first steps in developing a National Plan of Action, and assists with defining the scope of the NPA. For instance, is it possible to develop an holistic NPA which addresses all the issues within the CGPC Strategy, or should the NPA focus on one or two issues?

Understanding the context requires an understanding of the driving forces including:



A series of questions are set out below to guide the process of understanding the context. To answer these questions in detail it will be necessary to undertake a situation analysis and a stakeholder analysis, as described in Sections 3.2 and 2.3 respectively and Annex A-1 and A-3.

2.2.1. Identify the International and regional obligations

- What are the driving forces for action at the regional level?



For example, one of the key driving forces for developing an agrochemical National Plan of Action at the current time is the 'CGPC Strategy for improved agro-chemical use and management for the wider Caribbean'.

- Are there any international obligations that call for action on improving agro-chemical use and management?



For example, ratification of international conventions such as the Cartagena Convention and Rotterdam Convention may initiate action.

Alternatively demands from trading partners to improve agrochemical management may be a key economic driving force in taking action.

2.2.2. Identify key issues that are of public or political interest

- What are the key issues or concerns related to agrochemical use and management?



For example, there may be particular public concern related to health impacts of agro-chemicals. Tourism agents may have expressed concern for run-off of pesticides into coastal waters. The finance ministry may be concerned with the effects of agrochemical use on trade of agricultural produce.

2.2.3. Identify any related initiatives

- Are there on-going initiatives that are related to improved use and management of agrochemicals?
- Do these overlaps complement proposed action?



For example, in some circumstances there may be other national initiatives already in place (e.g. a national initiative on certification for Good Agricultural Practice.) These areas would therefore not need to be covered by the NPA but should be referenced within the plan.

2.2.4. Determine levels of political support

- What are the levels of support for the CGPC Strategy?
- What is the level of political-will in ratifying and implementing regional or international obligations?
- Is there political support to develop an holistic National Plan of Action, or is it necessary to focus on one or two key topics?

2.2.5. Identify supportive stakeholders

- Are there interested parties in government to develop a National Plan of Action?
- Who are the main stakeholders that would need to be involved in development and implementation of a NPA?

2.2.6. Identify available resources

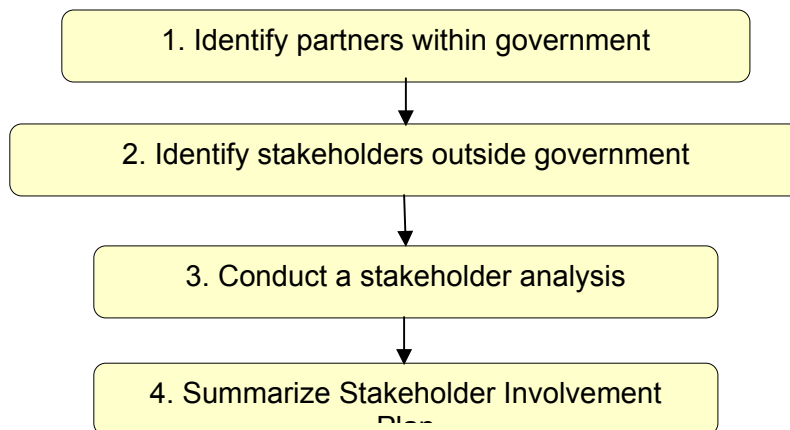
- What are the likely resources available to develop a National Plan of Action?
- Which areas of action will be able to attract sustainable forms of financing?

2.3. *Develop a Stakeholder Involvement Plan*

The National Plan of Action is a national document and will require government's commitment, support, endorsement, encouragement and resources for its development and implementation. In addition, the development and implementation will require the involvement of a wide range of stakeholders within and outside government.

Developing a stakeholder involvement plan will assist in clearly defining the key stakeholders, their perspectives, concerns and their level of involvement for the development and implementation of the Plan.

The steps required in undertaking a stakeholder involvement plan are outlined below:



Preparation

In developing a stakeholders' involvement plan, it is important that the following questions are kept at the forefront:

- What are the benefits of stakeholder involvement?
- What are the possible implications of not involving stakeholders?

2.3.1. Identify partners within government whose mandates are directly related to the issues to be addressed in the NPA

It is necessary for the lead agency for the NPA to undertake a desk review of the mandates of the various ministries, departments and agencies within government to identify those that are directly or indirectly related to the issues that are likely to be addressed by the NPA.

The following questions can be used to identify partners within government:

- Which partners within government have the potential to become involved in the NPA process?
- Who have mandates that are directly related to issues that are likely to be addressed in the NPA?
- Are there partners for whom the linkage is not immediately obvious?



For example, officials from a Ministry of Finance may have no direct mandate relating to agrochemical management or chemical management, but may make decisions that have profound implications for the success of a NPA such as budget allocation and taxes on agricultural inputs including agrochemicals.

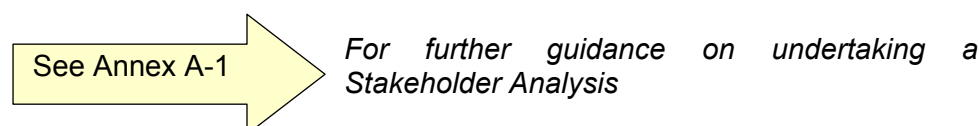
2.3.2. Identify potential Stakeholders outside of government

Apart from those partners within government, it will be necessary to involve stakeholders outside of government. In order to determine who should be involved or might want to be involved, the following questions can be asked:

- Who might be affected by the NPA?
- What are their interests and positions?
- Who has information and expertise that might be helpful?
- Who has been/is involved in similar initiatives or planning?
- Who has expressed interest in being involved in similar initiatives/efforts before?
- Who else might be interested in preparing the NPA?
- Are there stakeholders who might want to be fully involved, but for some reason can't be involved to the extent that they would like to be?

2.3.3. Conduct a Stakeholders' Analysis

Having identified the potential stakeholders, the next step would be to conduct a stakeholders' analysis. The stakeholders' analysis would provide a more thorough understanding of the interests of different stakeholders, the extent to which the NPA may affect them, and the reasons behind their likely support or opposition.



2.3.4. Summarize a Stakeholders' Involvement Plan

There are a number of ways to involve stakeholders, and it may comprise any or a combination of activities, strategies and relationships including two-way communication, stakeholder consultation, advisory boards, partnerships, joint decision-making and raising awareness of the NPA development early. Box 2-4 highlights the conditions for successful stakeholder participation.

Box 2-4 Condition for Successful Stakeholders Participation

Condition for Successful Stakeholders Participation

- **Transparency** – there should be opportunity for views to be adequately heard, considered and responded to; the reasons for decisions and the related factors that were considered must be adequately communicated
- **Ensuring Roles and Responsibilities are Clear**
- **Comprehensive Participation** – stakeholders should be involved where possible and appropriate, and as early as possible
- **Two-way Communication** - a communicative relationship between and among stakeholders and government must exist and must allow for feedback
- **Understandable and Timely Information Disclosure**
- **Stakeholder Education** - Educating stakeholders about issues can empower them to engage more actively and effectively
- **Adequate Funding to support their involvement**

In developing a stakeholder involvement plan it can be useful to look at their capabilities and assets, and then consider what category they would fall into:

1. Those that should serve on the coordinating committee
2. Those that should be involved in the planning and development processes
3. Those that should be involved in the implementation process
4. Those that should be involved in the monitoring and evaluation processes
5. Those who would like to be kept informed

This information can be summarized in a table as illustrated below (Table 2-1).

Table 2-1 Summarizing a stakeholder involvement plan

| Stakeholder | Capabilities/Assets | Category 1 | Category 2 | Category 3 | Category 4 | Category 5 | Details of Involvement |
|------------------------------|---|------------|------------|------------|------------|------------|--------------------------|
| E.g. Pesticide control board | Responsibility for overall management of agro-chemicals | ✓ | ✓ | ✓ | ✓ | | Form the core of the NCC |
| | | | | | | | |

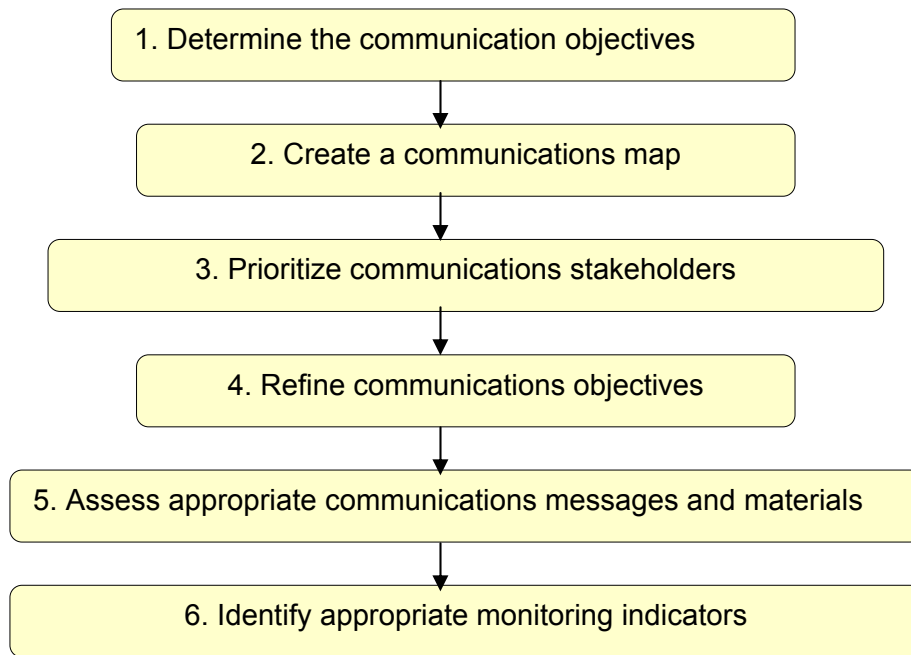
2.4. Develop and Implement a Communications Plan

Is it important for information on the progress of the NPA process to be communicated regularly to stakeholders. This is critical in obtaining support of key stakeholders and decision-makers and in securing the necessary human and financial resources for the development and implementation of the plan.

Consideration must therefore be given to the development and implementation of a Communications Plan very early in the process. Working through a communications plan will help answer the following questions:

- Which stakeholders need to be communicated with?
- What are the objectives of communicating with each stakeholder?
- What are the most effective communications channels?
- What are the most effective communications materials?

The following steps are required to develop a communications plan:



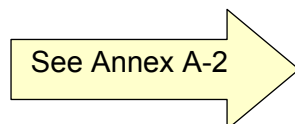
It will then be necessary to summarize the information and keep the communications plan regularly updated.

A communications plan will summarize all the information gathered in the steps above. An example of how a communications plan may look is given below in Table 2-2.

Table 2-2 Example of a communications plan

| Stakeholder | Ministries of Agriculture | Farmers | Other stakeholders |
|--------------------------|---|--|--|
| Communication objectives | Support the NPA and provide resources to achieve its objectives. | Aware of the national plan of action, how it aims to protect their health and what role they have to play. | (add a column for each stakeholder as appropriate) |
| Communication message | Agro-chemical management is a concern for farmer and consumer health. It is also important to ensure sustained exports to international markets. Improved agro-chemical management will improve production. A holistic NPA tackles all the related issues (e.g. import, manufacture, labeling etc) so that constraints are addressed. | Agro-chemicals can have serious consequences for health including children within the household. There is a national undertaking to reduce the impacts which will involve training sessions for farmers and greater access to health advice on pesticides. Farmers need to attend training and follow the recommendations. | |
| Communication material | Policy briefs Workshops | Radio broadcasts Posters | |
| Communication | Face-to-face meetings | As above | |

| | | | |
|------------------------------------|---|---|--|
| channels (if different from above) | Workshops | | |
| Monitoring Indicator | Endorsements for the NPA from Ministry of Agriculture, commitment of funds by the ministry to implement or develop NPA. | No of farmers attending training, No farmers changing behavior following training | |



For further guidance on developing a communications plan

In addition, examples of a communications plan and related communications materials are provided in Annex D-1. These are outputs from the CAMP Project.

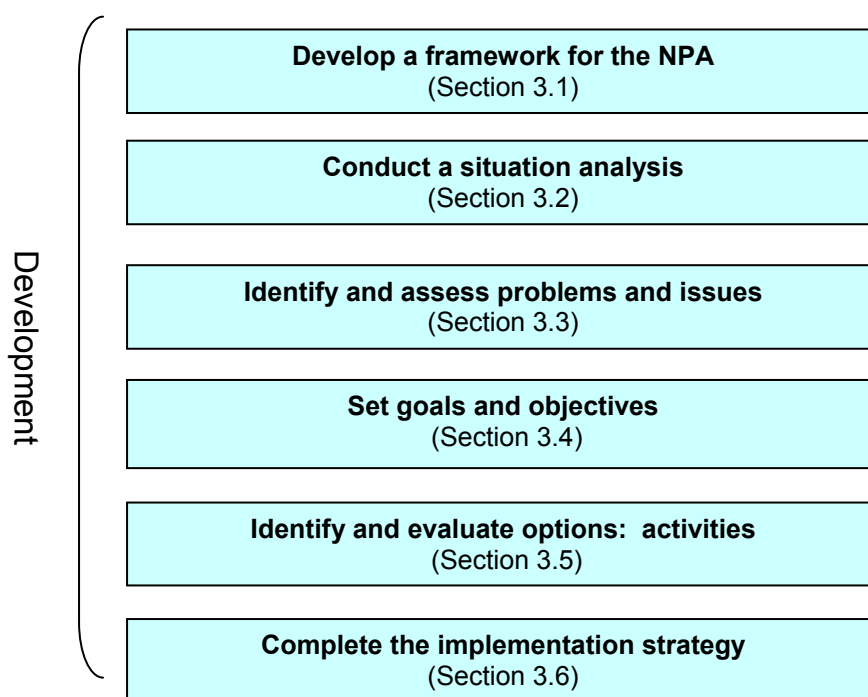


3. DEVELOPMENT

3. DEVELOPMENT PHASE OF THE NATIONAL PLAN OF ACTION

The general rule for the start of the Development Phase is that once the major preparatory tasks and considerations are addressed, key activities for the actual development of the NPA can begin.

The activities within the Development Phase are illustrated below:

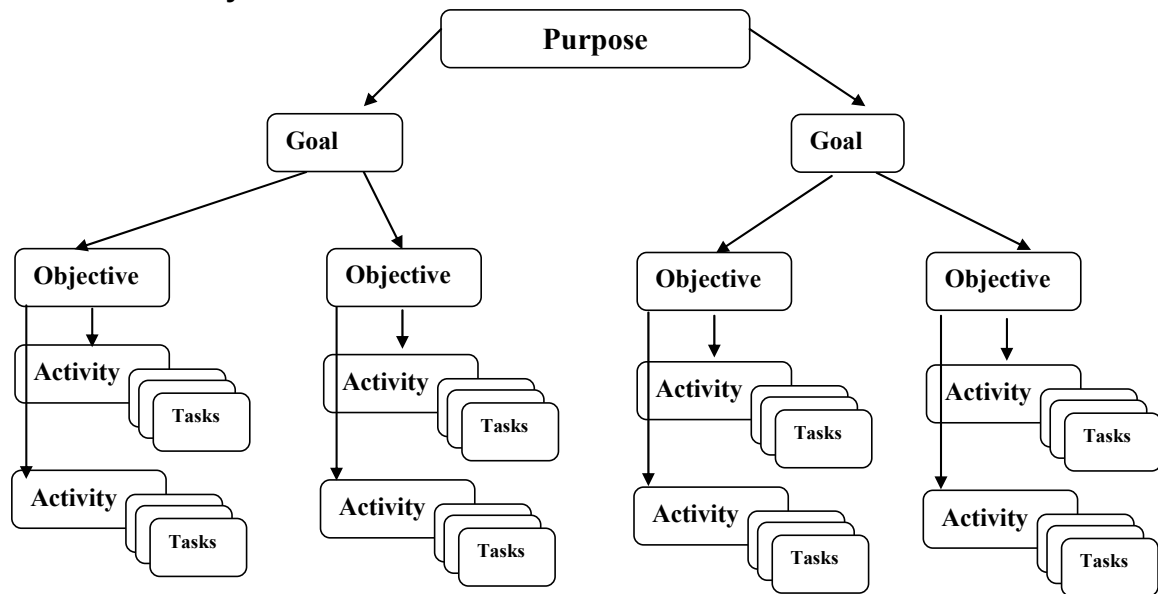


3.1. *Develop a Framework for the Development Process*

The development process leads towards a completed NPA. In order to achieve this, a framework needs to be developed that captures the key pieces of information such as the goals, objectives, activities, responsibilities, budget and indicators for measuring success.

This framework can be based on the following hierarchy and definitions.

3.1.1. Hierarchy



3.1.2. Definitions

Purpose: Why the program/project should be achieved and which super-ordinate (strategic, development policy) purpose the program/project serves. In many cases the purpose will be to support the implementation of the CGPC strategy of improving agro-chemical use and management in the wider Caribbean.

Goals: are concise statements that describe the overall purpose of the National Plan of Action.

Objectives: are measurable changes that will be realized if the National Plan of Action is successful.

Activities: can be defined as an element of work performed during the course of a project. An activity has an expected duration, cost and resource requirement.

Tasks: are further breakdowns of activities to assist in identifying resource requirements.

3.1.3. Framework

An example of a framework is given overleaf and allows the goals, objectives, activities and tasks to be recorded as well as information on responsibilities, budget and indicators for measuring success (Table 3-1). The completion of such a framework provides a useful summary of the NPA, which in full will be a substantial document. It is also possible to use a logical framework if this is more familiar.

Table 3-1 A Framework for developing a National Plan of Action

| Goal | Objectives | Activities (Tasks) | Responsibility | Budget | Indicators |
|-------------|-------------------|---------------------------|-----------------------|---------------|-------------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Development

3.2. Develop a route-map for the development phase

Although the focus of this exercise is to develop a National Plan of Action, it is worth spending some time planning what will take place in the development phase. A useful way of achieving this is by developing indicators that will measure progress in the development phase and then determine what activities need to take place to achieve this. Refer to Section 5 for guidance on developing indicators for the development phase.

3.3. Conduct a Situation Analysis

One of the key activities within the development phase will be conducting a situation analysis. This enables the team to review the context in more detail and to determine the priority problems that need to be addressed. Once the priority problems have been addressed it is possible to identify goals and objectives for the NPA.

While the major problems and issues in the management of agrochemicals in the Caribbean have been documented in the CGPC Strategy, it is important that when developing the NPA, a similar identification, assessment and prioritisation is done within the national context.

Situation analyses have been undertaken for St Lucia and Jamaica. These helped define the overarching CGPC Strategy for improved agro-chemical use and management for the wider Caribbean and assisted in defining specific priorities for St Lucia and Jamaica (Box 3-1).

Box 3-1 Specific priorities for Jamaica and St. Lucia

Informing knowledge gaps

In **St Lucia** it was found that most of the research on agro-chemical impacts has been focused on the banana sector, and within the Roseau Valley. Review of the context therefore identified the need to examine impacts in other sectors and geographical areas (see Information Brief No. 2).

Prioritizing issues

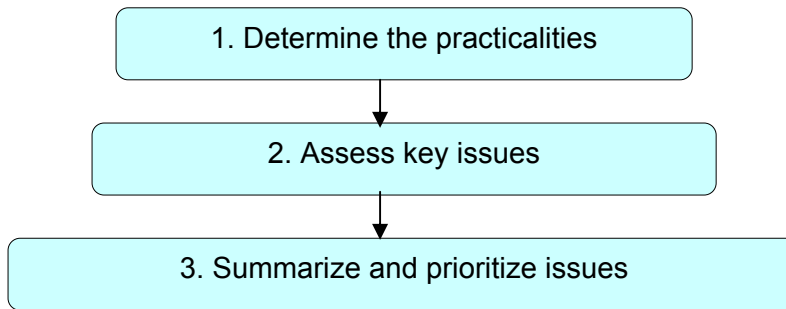
In **Jamaica** the review found that pesticide residue on foods and in the environment are key issues, as well as poisoning of children. The draft National Plan of Action takes this into account, and is currently focusing on monitoring the human health and environmental effects of pesticides.

Identifying overlaps and opportunities for collaboration

The reasons for focusing on monitoring pesticide impacts within the **Jamaican** draft National Plan of Action were also based on a review of the current institutional arrangements and initiatives within Jamaica. It was found that Good Agricultural Practices is an area well represented through a variety of programmes, whereas monitoring pesticide residue and its impact is not so comprehensively addressed. The review also revealed the opportunity for collaboration with interested partners such as the laboratories for testing,

Developing a situation analysis at the national level is a case of bringing various pieces of information together to highlight the priority areas for action and where there are gaps in the understanding of the management system.

The following steps are required in undertaking a situation analysis:



3.3.1. Determine the practicalities of undertaking a situation analysis

Undertaking a situation analysis will require organization and resources but is an essential starting point for establishing priority areas to be addressed by the National Plan of Action. The level of analysis will need to be scaled to the resources available.

The process can be streamlined by:

- Nominating a coordinator or coordinating body e.g. National coordinating committee (NCC);
- Encouraging participation of a wide group of stakeholders;
- Setting up a system of meetings and working groups to draft and approve chapters.
- A suggested structure for a situation analysis report is given in Box 3-2 below.

Box 3-2 Suggested structure for a situation analysis report

| |
|---|
| <p>Chapter 1: Agro-chemical Production, Import, Export, Use and Disposal</p> <p>Chapter 2: Environment and public health impacts of Agro-chemicals</p> <p>Chapter 3: Legislative, regulatory and institutional framework</p> <p>Chapter 4: Supporting administrative systems</p> <ul style="list-style-type: none">• Data management issues• Financing mechanisms• Awareness <p>Chapter 5: Summary of key issues: identify problems and priorities (see Section 2.3)</p> <p>Annexes</p> <ul style="list-style-type: none">• Annex 1: Glossary• Annex 2: References• Annex 3: Names and Contacts of key individuals and organizations involved in agro-chemical management |
|---|

The main issues and questions to cover within a situation analysis include:

Agrochemical Production, Import, Export, Use and Disposal (Chapter 1)

- What implications do current production and import levels have on the use of agro-chemicals?
- What are the possible areas of agrochemical abuse – e.g. over-use, disposal?

- What recommendations are there to improve the efficiency of fertilizer and pesticide use; or provide alternatives to agro-chemicals?
- What are the major health risks and areas of pollution related to the use of agro-chemicals?

Environment and public health impacts of Agrochemicals (Chapter 2)

- Which agro-chemicals are of most concern for potential impacts on the environment and public health?
- What characteristics of the environment, farming or management practices increase the likelihood of environmental or public health impacts?
- What evidence is there of environmental or health impacts?
- Where should research be targeted if there are significant knowledge gaps?
- What are the priority actions that could be taken to reduce environmental and public health impacts of agrochemicals?

Legislative, regulatory and institutional framework (Chapter 3)

- Where is regulation, guidance or enforcement lacking for improved use and management of agrochemicals?
- What are the over-laps in the existing legislative, non-regulatory and administrative system, and roles and responsibilities of different stakeholders?
- What are the relevant existing structures upon which cooperation for improved agrochemical management can be built?
- What are the strengths and gaps of capacity within various ministries and institutions in terms of their capacity to address agrochemical issues?

Supporting systems e.g. data management issues; financing mechanisms and levels of awareness (Chapter 4)

- Is financing for agrochemical management sufficient?
- Where are the opportunities for improving sustainable financing?
- What are the key data management priorities? Will all of these be addressed by the regional database project?
- What are the key areas within the agrochemical life-cycle where public or policy level awareness needs to be increased e.g. health and safety; responsibilities; risks?
- Who are the key stakeholders that should participate in the development and implementation of a NPA? What are the means of engaging their interest?

3.3.2. Summarize Key Issues

The priority problems and issues identified in the situation analysis can then be summarized within Chapter 5 of the situation analysis report to give an overview of:

- Priority problems related to chemical import, use and disposal;
- Opportunities for improving national legal and regulatory instruments, including its implementation and enforcement;
- Potential for improving information collection to support agrochemical management;
- Actions that can improve the awareness of public, government and other institutions related to concerns with agrochemical use and management;
- Means for mobilizing human and financial resources for effective agrochemical management; and,
- Opportunities to link with on-going initiatives and supportive stakeholders.

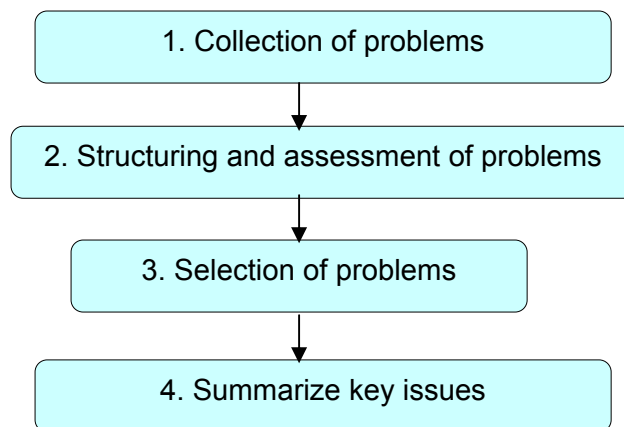
See Annex A-3

For further guidance on undertaking a Situation Analysis

3.4. Establishing Priorities

A series of problems and issues would have emerged from the situation analysis. Prioritising these problems assists in defining the goals and objectives for the NPA. If problems are categorised it is possible to turn overarching problems into goals and sub-problems into objectives.

The process of establishing priorities takes the following steps:



3.4.1. Collection of problems

The stakeholder and situation analyses should have resulted in an assembled list of issues and problems. There may be need to augment this information through the use of focus group discussions. In collecting the problems, the following questions are important:

- What situation needs to be changed?
- What are the problems?
- Who is directly affected by these problems?
- How do those affected and the other major stakeholders see the problems?
- What would happen if these problems were solved?

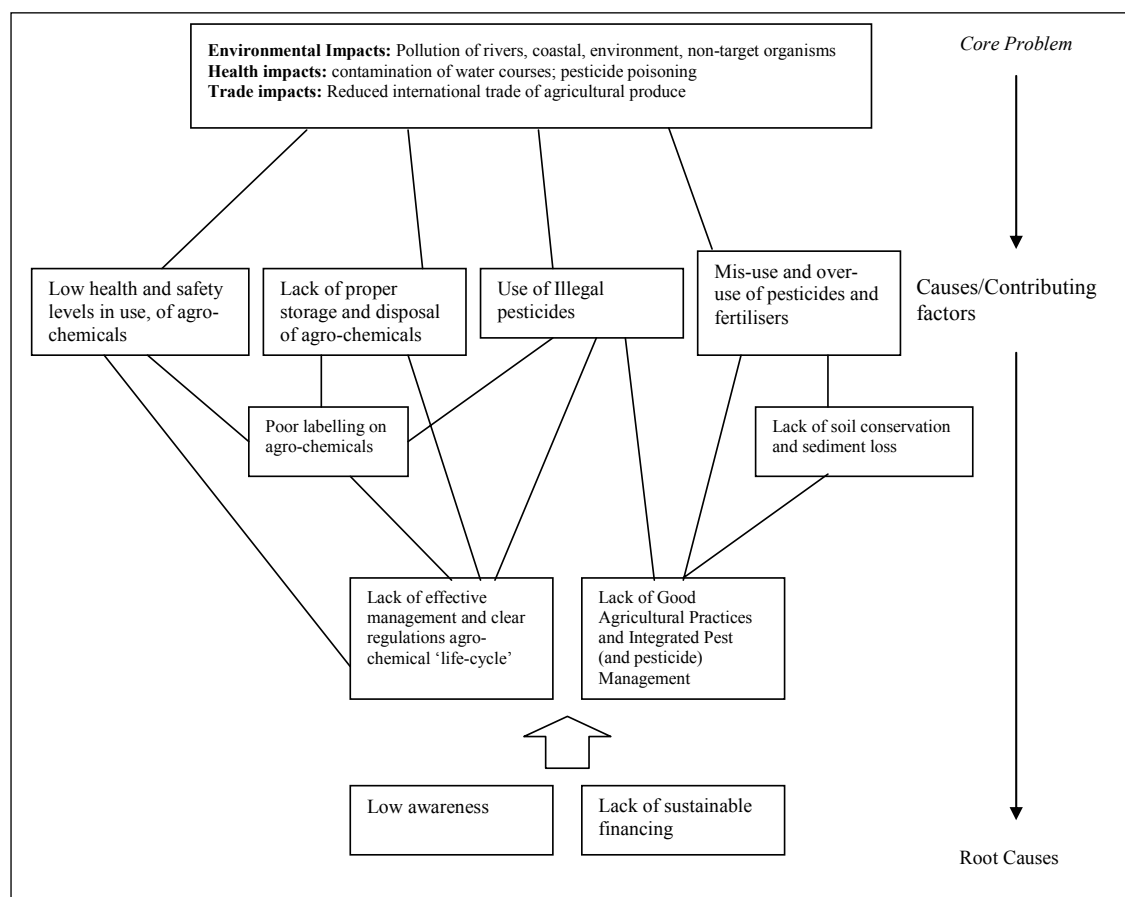
3.4.2. Structuring and Assessment of the Problems

To assist with prioritising the list of problems and issues it is useful to start by categorising them. This can be done either by:

- **Structuring of cause-effect-relationship;** which problems cause other problems? This involves construction of problem tree. See Box 3-3
- **Structuring according to similarity;** which of the problems identified belong together? (group formation, clustering). See Box 3-4.

The latter exercise of developing a problem tree is particularly useful as it differentiates between problems that are causal factors and those that are effects. When we come to determining goals and objectives later it will be important to focus on the causal factors.

Box 3-3 Example of a problem tree



A problem tree provides a useful visualization of the relationship between the problems and issues by setting out the problems in hierarchical order. The exercise helps to see how different problems are linked and which issues need to be tackled to get to the root of the problem.

- Drawing a problem tree requires identifying the core problem and how this is caused by underlying factors and root causes.
- Core problems are identified and written down. Then, for each core problem, causes are identified and written beneath the core problems. Causes can be identified for a number of additional levels (it may be helpful to “work upwards” and well as downwards to identify causes and problems).
- Once a considerable number of causes have been identified, the problem tree can be reviewed and causes rearranged as necessary.

Box 3-4 An example of structuring problems according to similarity

| Agro-chemical problems in St Lucia and Jamaica | |
|--|---|
| Pesticide Use | Sediment/soil loss <i>contributing to agro-chemical pollution and requiring further use of fertilisers</i> |
| Lack of soil conservation allows pesticide contamination to be carried downstream | Lack of soil conservation allows pesticide contamination to be carried downstream |
| Use of illegal pesticides | Soil erosion from steep slopes |
| Wrong use/application: Over-use of pesticides Wrong application rate/timing Wrong pesticide for pest or disease | Flood waters remove protection systems |
| Use of cocktail of pesticides | Wrong type of soil protection |
| Poisoning of user/family Chronic Acute | Removal of trash |
| Pollution: River Coastal Environmental Non-target species | Farming of unsuitable soil/slopes |
| Improper storage and disposal induces contamination | |
| Repackaging by vendor removes labelling | |
| Improper or no protective clothing | |
| Inefficient or dirty application equipment | |

Development

3.4.3. Prioritising problems

Having structured the problems, the next step is to prioritise the problems and determine the issues that will be addressed in the NPA.

A variety of different criteria can be used to prioritise problems including:

- The frequency with which a particular problem is identified/mentioned by members;
- Scale of problem;
- Level of concern;

One criterion can be selected (Box 3-5) (in this case, frequency of occurrence) or a number of criteria may be used within an evaluation matrix (Box 3-6).

Box 3-5 Example of recording the frequency that problems are identified by stakeholders

| Stakeholder | Problems/Issues | | | | | | | | |
|---|-----------------|-----------|-----------|--------|-----------|-------------------|-------------|-----------------|-----------|
| | Illegal import | Wrong use | Cock-tail | Health | Pollution | Storage/ Disposal | Repackaging | Protective wear | Equipment |
| Import | | | | | | | | | |
| Port Authority | ✓ | | | | ✓ | ✓ | | ✓ | |
| Customs & Excise | ✓ | | | | ✓ | | | | |
| PCB | ✓ | | | ✓ | ✓ | ✓ | | ✓ | |
| Import agent | ✓ | | | | | ✓ | ✓ | | |
| Manufacture | | | | | | | | | |
| Chemical co | | | | | ✓ | ✓ | ✓ | | ✓ |
| PCB | | | | ✓ | ✓ | | ✓ | ✓ | |
| Distribution | | | | | | | | | |
| Agric board | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Farm shop | | | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| Chemical depot | | | ✓ | | | ✓ | ✓ | | |
| Application | | | | | | | | | |
| Pest operator | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Farmer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Agencies/ Institutions | | | | | | | | | |
| Health Authority | ✓ | ✓ | | ✓ | | | | ✓ | |
| Extension Service (agriculture, fish, forestry) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| National NGO's | ✓ | ✓ | | ✓ | ✓ | ✓ | | | |
| International PAHO, FAO | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

Box 3-6 Example of an evaluation matrix

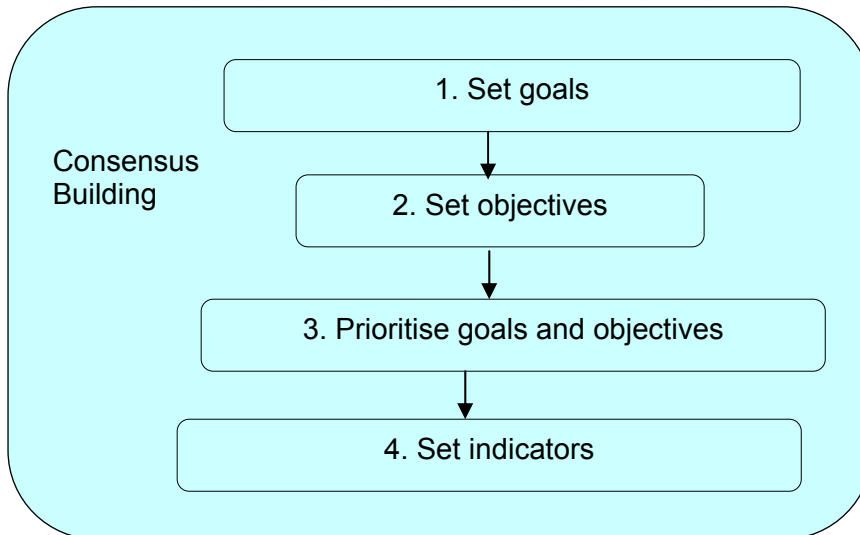
| Nature of Problem | Scale of problem (Local, national, regional) | Level of concern (low, medium, high) | Level of environmental impact (low, medium, high) | Level of economic impact (low, medium, high) | Priority ranking (1 to 5; 1 = most severe) |
|-------------------------------|--|--------------------------------------|---|--|--|
| Pollution of watercourses | | | | | |
| Marine and coastal pollution | | | | | |
| Soil contamination | | | | | |
| Residues on food | | | | | |
| Drinking water contamination | | | | | |
| Hazardous disposal | | | | | |
| Health concerns for farmers | | | | | |
| Public health | | | | | |
| Spillage/accidents | | | | | |
| Storage of obsolete chemicals | | | | | |
| Unknown chemical imports | | | | | |

Each criterion can be scored and an overall ranking calculated for each problem. Criteria can also be weighted if some are more important than others.

3.5. Set management goals and objectives

Following the situation analysis and evaluation of problems, there should be an understanding of the priority problems.

The following steps are required in setting the goals and objectives.



These steps require an overarching approach to consensus building. It is an iterative process through a range of consultation techniques such as meetings of the National Coordinating Committee, stakeholder meetings, correspondence etc.

3.5.1. Setting Goals

Once you have categorised problems it is possible to work out 'overarching problems' or those that are the causal factors to other problems. These can be converted into goals by turning them into positive statements.



If the overarching **problem statement** is: '*Poor agro-chemical management and practices contribute to negative impacts on human health and the environment.*' The **Goal** can be defined as: '*Improved agro-chemical management and practices reduces the negative impacts of agro-chemicals on human health and the environment.*'

It is also possible to use the CGPC Strategy as a starting point in defining goals for a National Plan of Action. The CGPC strategy has the purpose of 'Improving agro-chemical use and management for the wider Caribbean.' This can be broken into goals as follows: i) harmonized management; ii) Good Agricultural Practices; iii) monitoring and research and a number of supporting sub-goals such as: iv) sustainable financing, v) awareness and vi) capacity building. The NPA goals may fit into one or all of these different areas.

An example of a break-down of goals for a National Plan of Action is given in Box 3-7.

Box 3-7 Example of a NPA Goals

- The **CGPC Strategy Purpose** is: Improved agro-chemical use and management for the wider Caribbean: management of agro-chemicals for improved public and environmental health.
- Building on this a **National Plan of Action Purpose** could be: Reduce the measurable environmental and health impacts of agro-chemicals by 50% in the next 10 years
- The Goals could be as illustrated in the table below:

| CGPC goals | National Action Plan Goals |
|--|---|
| (1) Implement the strategy as a whole | Ensure the National Action Plan is effectively coordinated from its inception to enable the strategy to be implemented as a whole |
| (2) Implement harmonised agro-chemical management | Implement a harmonised agro-chemical management regime in coordination with other CGPC members with a management a management framework for the entire life-cycle of agro-chemicals |
| (3) Implement GAP and other good practice codes on conduct | Implement Good Agricultural Practices and other good practice codes of conduct, achieving EUREGAP certification of export farmers |
| (4) Inform management decisions through: Public health monitoring; Environmental monitoring and Further research | Establish and operationalise a monitoring and research system for environmental and health impacts of agro-chemicals to inform management decisions |
| (5) Establish supportive system for agro-chemical management through sustainable financing, communication, education and capacity building | Establish a supportive system for agro-chemical management by 2015 |

It is recommended that all the goals within the CGPC Strategy are considered as this ensures a holistic approach to agro-chemical management. However there may be resource constraints in achieving all goals at once so it will be necessary to select those to focus on initially.



For example, the current Jamaican National Plan of Action has targeted Goal # 4: monitoring and research. There is potential to develop further goals and an over-arching Overall Goal to cover these, as priorities become apparent and as further strategic alliances are made.

3.5.2. Setting objectives

Once you have identified the overarching goals it is necessary to look at the problems that fell under the overarching problems and turn these into positive statements that can act as objectives.

Objectives must be SMART (**S**pecific; **M**easurable; **A**ttainable; **R**ealistic and **T**ime bound), i.e. quantifiable by time, quantity and responsibility.



For example if some of the **problems** that falls under ‘poor agro-chemical management and practice include ‘*poor agro-chemical storage and disposal practices*’; ‘*pesticide poisonings*’ and ‘*poor labeling*’ the following **objectives** can be defined:

- *Handling, storage and disposal practices of retailers and farmers improved by 75% by 2007;*
- *Incidences of pesticide poisoning associated with incorrect pesticide application, reduced by 50% by 2008*
- *Compulsory standards for labelling and re-packaging implemented by 2008*

Section 3 of the CGPC Strategy outlines a number of recommended actions at the national and regional levels under each of the sub-areas. These actions can be used as a basis for developing objectives and defining activities. Box 3-8 provides an example of a breakdown of objectives for goals (2) and (5). The objectives have been adapted from the recommendations outline within Section 3 of the CGPC Strategy.

Box 3-8 Example of setting objectives

| CGPC goal | NPA goal (2) | Objectives |
|---|---|--|
| (2) Implement harmonised agro-chemical management | Implement a harmonised agro-chemical management regime in coordination with other CGPC members with a management a management framework for the entire life-cycle of agro-chemicals | National Governments sign and implement relevant international protocols (e.g. PIC, POPs, UNEP LBS Protocol, Annex IV Agricultural Non-Point Sources of Pollution) by 2006 |
| | | Ratify and adopt model legislation on Pesticides and Toxic Chemicals by 2006. |
| | | Fund, support, and utilize the regional database by 2010 |
| | | Support regional initiatives for harmonization (see strategy document) <i>[ongoing]</i> |
| | | Appoint dedicated full time staff [including a board] to PCB to administer the system by 2006 |
| | | Establish a system for appropriate classification and selection of chemicals based on benefits, human and environmental threats by 2006 [which reflects regional harmonization]. |
| | | Implement an established agro-chemical / pesticide registration system for import that reflects the requirements of the harmonized legislation by 2007. |
| | | Implement an established certification system for pesticide control operators by 2010 [which reflects regional harmonization] |
| | | Implement a licensing system for sale and use of agro-chemicals (with requirements for packaging, labeling, storage, distribution and disposal) by 2008 [which reflects regional harmonization]. |
| | | Strengthen enforcement of agro-chemical legislation and certification and/or licensing systems throughout the agro-chemical life-cycle by 2015 |

3.5.3. Prioritise goals and objectives

Although problems have already been prioritised by this stage in terms of importance, it may also be necessary to prioritise objectives. There may be a number of different objectives that could fit under a particular goal. However, as there may not be the resources available to achieve all the possible objectives it will be necessary to use a series of pragmatic criteria to select the most appropriate choices. Examples of criteria that can be used at this stage include:

- The simplest problems to solve;
- The problems without which one cannot continue;
- Ability to control problem;
- Availability of data;
- Availability of financing to address the problem.

An example of an evaluation matrix to compare different objectives is provided in Box 3-9.

Prioritisation can also be assisted by answering the questions below:

- Is there a driving force to achieve this goal/s? E.g. Are there international or regional obligations that need to be fulfilled; or economic drivers for reform;
- Are there supportive stakeholders and partners within and outside government for achieving this goal/s? For example a key issue for Jamaica has been the demand for this action by a number of other government departments;
- Are there (potential) budget lines that can support achieving this goal/s? ;
- Are there 'low hanging fruit'? What goals can be relatively easily achieved and may trigger further (possibly more substantial) action?

Box 3-9 An example of using an evaluation table to compare objectives

| Criteria | Objective 1: An established agro-chemical registration system for import by 2006 | Objective 2: An established pesticide registration system for use by 2006 | Objective 3: Strengthened regulations, enforcement and penalties to avoid agro-chemical misuse by 2008 | Objective 4: Defined roles and responsibilities of stakeholders for implementation of management framework by 2008 |
|------------------|--|---|--|--|
| Effective | 5 | 4 | 2 | 3 |
| Affordable | 5 | 5 | 2 | 5 |
| Easily monitored | 5 | 4 | 1 | 1 |
| Feasible | 5 | 4 | 2 | 3 |

1 = Criterion is strongly against the option
 2 = Criterion is against the option
 3 = Criterion is neither against nor supports the option
 4 = Criterion supports the option
 5 = Criterion strongly supports the option

3.5.4. Set indicators

It will be important to set indicators at this stage for the purpose, goal and objectives. If indicators are set at this stage it is much easier to define activities. See Section 5 and Annex B-1 and Annex B-2 for examples of indicators and monitoring forms. Examples of indicators are also provided in Box 3-10.

Box 3-10 Example of setting indicators for the purpose, goal and objectives

| Purpose | Indicator | Means of Verification |
|---|--|---|
| Improved agrochemical use and management | Reduced rejection of agricultural produce for export Reduction in incidences of pesticide related illnesses by 75 % by 2007 | Trade records |
| Goal | Indicator | Means of Verification |
| Improved agrochemical management and practices reduce the negative impact of agrochemicals on human health and environment by 50% by 2010 | Reduction in incidences of pesticide related illnesses by 75 % by 2007 Reduced pesticide contamination of water and soil by 50 % by 2010 100% of potable water samples tested indicate an absence of pesticide residues of 10 selected pesticides by 2010 Vigour and abundance of X indicator species in the environment increased by 25% by 2010 | Hospital records Monitoring reports Monitoring reports Monitoring reports of indicator species |
| Objective | Indicator | Means of Verification |
| To obtain proper use of agro-chemicals by 75% of the end-users by 2008 | Pesticide residue levels (of 75% of agricultural produce samples tested) meet internationally accepted standards by 2008 | Laboratory records |
| Handling, storage and disposal practices by retailers and farmers improved by 75% by 2007 | Reduction in incidences of pesticide related illnesses of employees responsible for handling by 75 % by 2007 Designated disposal facilities use increased by 50 % by 2007 50 % reduced contamination of environment around storage areas by 2007 | Hospital records Records of disposal facilities Monitoring records of indicator species |
| Reduction in incorrect pesticide application methods and faulty application equipment by 2008 | >75 % of pesticide applicators using appropriate and well maintained equipment and adequate personal protective gear by 2008 | Extension officers record Hospital record |
| Compulsory standards for labelling and re-packaging of agro-chemicals implemented by 2008 | >90% of packages checked repackaged and/or labelled according to standards within 12 months of implementation of standards | Market survey reports |

3.5.5. Ensuring participation and reaching consensus

It will be important to ensure there is participation throughout these steps. This will allow stakeholder buy-in and issues to be identified that might otherwise be overlooked.

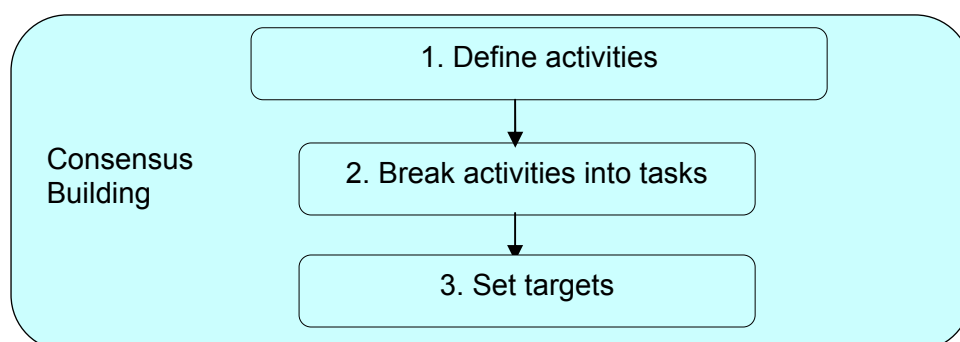
Participation can be encouraged if there is open communication among stakeholders and specifically between government and non-government organizations. This can be achieved through implementation of the communication plan e.g. by encouraging the participation of stakeholders within decision meetings, and keep stakeholders informed through advertisements; leaflets; exhibitions; questionnaires; liaison staff; round-tables; workshops; and public meetings.

It should be noted that achieving consensus on selecting goals, sub-goals and objectives can be challenging.

3.6. *Identify and evaluate activities*

Following on from the identification and agreement of goals and objectives, it is necessary to break the objectives further down into activities and tasks.

The following steps are involved in identifying and evaluating activities:



3.6.1. Define activities

A set of discrete and separately identifiable activities will need to be defined in order to achieve the various objectives, sub-goals and overall goal.

Section 3 of the CGPC Strategy gives guidance on what activities may be needed to achieve goals of the strategy. It may also be useful to brainstorm further activities in working groups e.g. the NCC or through consultation with wider stakeholders and organizations with experience of planning similar action plans.

An example of setting activities to achieve the objective for 'Establishing a sustainable financing system by 2010' is illustrated in Box 3-11.

Box 3-11 An example of setting activities

| Goal (5) | Objectives | Activities |
|--|---|--|
| Establish a supportive system for agro-chemical management by 2015 | 1) Establish a sustainable financing system by 2010 | Review recommendations from the regional project on sustainable financing for agro-chemical management |
| | | Consider options and design system for sustainable financing |
| | | Obtain agreement on financing system |
| | | Legislate for financing system |
| | | Operationalise financing system |
| | | Establish budget for financing to cover different aspects of the National Action Plan |
| | | Ensure monitoring system for financing is established and running |

3.6.2. Breaking activities into manageable tasks

Some activities may require breaking down into tasks, to help define resource and responsibilities. As a rule of thumb activities should not be broken into more than five tasks. An example of a task breakdown is given in Box 3-12.

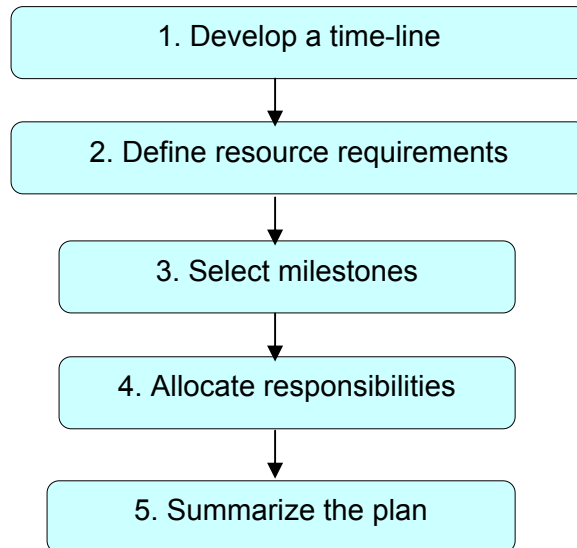
Box 3-12 Example of breaking down activities into Tasks

| Goal (5) | Objectives | Activities | Tasks |
|--|---|--|--|
| Establish a supportive system for agro-chemical management by 2015 | 1) Establish a sustainable financing system by 2010 | Review recommendations from the regional project on sustainable financing for agro-chemical management | <ul style="list-style-type: none"> • Establish task force and TORs for review • Task force to undertake consultations and review of available literature including regional report |
| | | Consider options and design system for sustainable financing | <ul style="list-style-type: none"> • Hold meetings to discuss regional report and options for sustainable financing • Produce a report summarizing recommended system for sustainable financing |
| | | Obtain agreement on financing system | <ul style="list-style-type: none"> • Develop a policy brief and presentation to give to Ministry responsible for making decisions on financing • Hold meetings to agree and discuss sustainable financing option |
| | | Legislate for financing system | <ul style="list-style-type: none"> • Prepare draft legislation • Submit legislation for review • Finalize and pass legislation |
| | | Operationalize financing system | |
| | | Establish budget for financing to cover different aspects of the National Action Plan | <ul style="list-style-type: none"> • Prepare draft budget through task force • Finalize budget with inputs from relevant Ministries |
| | | Ensure monitoring system for financing is established and running | |

3.7. *Develop an Implementation Strategy*

Following on from the identification of activities and tasks it is necessary to develop a time-line of activities, identify resource requirements and allocate responsibilities.

The following steps are involved in developing the implementation plan:



3.7.1. **Develop a time line of activities**

Developing a time line helps to illustrate when different activities will need to take place and what the sequence of activities will be.

An example of a time line is given in Box 3-13. This example is taken from the CGPC's Regional Plan of Action (RPOA) to implement the 'Strategy for improved agro-chemical use and management for the wider Caribbean'.

Box 3-13 Example of a Time-Line

Objective: To obtain proper use of agro-chemicals by 75% of the end-users by 2008

| Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|--|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| Train farmers in the proper use of agro-chemicals | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 1.1 Prepare training program | ■ | | | | | | | | | | | | | | | |
| 1.2 Prepare training manual/material | | ■ | | | | | | | | | | | | | | |
| 1.3 Conduct the training | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

3.7.2. Defining resource requirements

It is worth taking time to consider the resource requirements for each activity and task in detail. This will avoid the action plan from falling into financial difficulties. It will also help to approach donors and different ministries for funding or commitment, if costs are well defined.

A range of resources will be required to implement the action plan, including:

- Financial resources
- Human resources (capacity, skills)
- Facilities
- Equipment
- Materials
- Other requirements e.g. travel, training

A possible format and example for a resource requirements matrix is given in Box 3-14 below:

Box 3-14 Example of a resource requirements matrix

| Activity and Tasks | Human Resources | Facilities | Equipment | Materials | Other requirements | Total financial resources |
|--|--|--------------------|-----------|--------------------|--------------------------|---|
| Activity: Review options for pesticide registration and establish recommendations | | | | | | |
| <i>Task:</i> Establish task force for review | 3-5 technical personnel (e.g. PCB, import, customs, & justice representatives) | | | | | 2 person days at \$/day to nominate task force |
| <i>Task:</i> Undertake literature review & consultations | 30 person days for review and consultations | | | Reference material | Travel for consultations | 30 person days at \$ rate/day |
| <i>Task:</i> Hold meetings with task force to determine recs | 20 person days for four meetings 2 person days for a facilitator | Meeting facilities | | | | 4 meetings at \$ per meeting 20 person days at \$ rate/day |

3.7.3. Select milestones

A selected number of activities can be chosen as milestones which indicate progress in implementing the plan. The simplest milestones are the dates estimated for start and completion of an activity.

3.7.4. Allocating responsibilities

The range of issues to be covered by the NPA may be wide. Responsibilities within government are likely to be spread over several departments and levels, and those outside of government will fall to a wide range of stakeholders outside of government such as industry, NGOs, consumer groups.

It is necessary to clearly define responsibilities so that it is clear to implementation partners as well as the general public. Discussions, about which agencies are responsible for what activities, should form part of the process of developing the plan. Responsibilities can be recorded within a matrix, like the example given in Box 3-15 below:

Box 3-15 Example of a responsibility matrix

| Activity/ Task | Stakeholder 1: PCB/PCA | Stakeholder 2: Ministry of Finance | Stakeholder 3: e.g. Ministry of Agriculture | Stakeholder 4: e.g. Ministry of Health | Stakeholder 6: e.g. Education NGO |
|----------------------|-----------------------------------|--|---|--|---|
| Establish Task Force | Coordinate and appoint task force | Endorse task force | Recommend participants for task force | Recommend participants for task force | Recommend participants for task force |

To assist with assigning responsibilities it will help to work through the following questions:

- Who has the appropriate knowledge, skills, facilities, budgets?
- Who has shown commitment?
- Does each participant understand what is involved?
- Who still needs to be approached to obtain commitment?

3.7.5. Summarize the plan in the NPA framework

An example of a developed framework for various activities under one objective is given in Box 3-16 below.

Box 3-16: Example of a completed framework from Activity level

| Activities | Tasks | Responsibility | Budget | Milestones |
|--|--|--|--------|---|
| Review recommendations from the regional project on sustainable financing for agro-chemical management by #; | <ul style="list-style-type: none"> Establish task force and TORs for review Task force to undertake consultations and review of available literature including regional report | PCA, Ministry of Finance | \$2500 | Action initiated for assessing options for sustainable financing by <i>[date]</i> |
| Consider options and design system for sustainable financing by #; | <ul style="list-style-type: none"> Hold meetings to discuss regional report and options for sustainable financing Produce a report summarizing recommended system for sustainable financing | PCA, Ministry of Finance, Appointed task force | | |
| Obtain agreement on financing system by #; | <ul style="list-style-type: none"> Develop a policy brief and presentation to give to Ministry responsible for making decisions on financing Hold meetings to agree and discuss sustainable financing option | PCA, Ministry of Finance, Appointed task force | | |
| Legislate for financing system by #; | <ul style="list-style-type: none"> Prepare draft legislation Submit legislation for review Finalize and pass legislation | PCA, Ministry of Finance, Appointed task force, Legal Office | | |
| Operationalize financing system by #; | | PCA, Ministry of Finance, | | Sustainable financing system in place by <i>[date]</i> |
| Establish budget for financing to cover different aspects of the National Action Plan by #; | <ul style="list-style-type: none"> Prepare draft budget through task force Finalize budget with inputs from relevant Ministries | PCA, Ministry of Finance, Appointed task force, | | |
| Ensure monitoring system for financing is established and running by #. | | PCA, Ministry of Finance, Appointed task force, | | |

IMPLEMENTATION

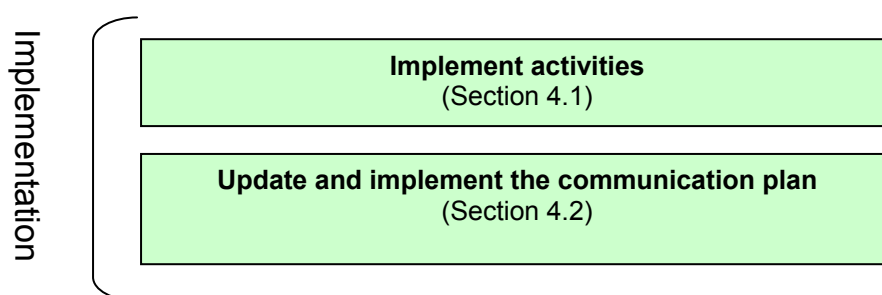
Implementation

4. IMPLEMENTATION OF THE NPA

Preparatory work done in the development phase of the NPA must be systematically carried through to the implementation phase. Very often good plans fail to deliver as expected because of poor implementation.

Successful implementation involves a number of steps executed through a locally relevant mechanism overseen by a national coordinating committee: a plan launch; communications and awareness raising; adequate resources; well defined tasks for the executing agency for each component of the plan (see Part 3); and, monitoring and evaluation. Political will and strong national leadership are also needed for the effective and successful implementation of NPA.

Implementation of the National Plan of Action (NPA) requires the following phases:



4.1. *Implement activities*

In order to implement activities it will be necessary to set up a mechanism for coordinating implementation.

The National Coordinating Committee should seek to coordinate implementation by taking account of both the individual approaches of the agencies that will be involved in the NPA implementation and the need for consistency on the part of all those involved in the implementation of the Plan. This should be done in consultation with the agencies concerned.

For example, it may be desirable for each of the implementing agencies to provide progressive reports on their activity. The NCC should meet on a periodic basis to review these reports and to monitor how the activities of the various implementing agencies compare with the commitments provided for in the plan.

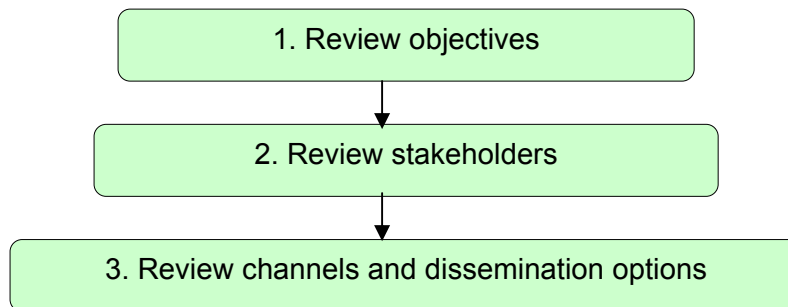
It will also be necessary to ensure the plan is institutionalised and mainstreamed into different sectors plans and budgets. By having the NPA institutionalised, the ongoing activities of the NPA would become part of the mandate of one or more government agencies.

4.2. *Update the communications plan*

A communications plan was developed during the preparation and development stage of the NPA. If the implementation of the NPA is to be effective, it is necessary that all relevant stakeholders as well as the general public are aware of it and give it

their support. Raising awareness about the NPA is a key tool for gaining support of the Plan and its implementation.

It is therefore necessary to update the communications plan for the implementation phase through the following steps:



Wherever possible, the communications plan should involve partners from the community, NGOs, the professions, labour and business to enhance the immediacy and relevance of media messages.

4.2.1. Review communications objectives

A number of communications objectives would have been defined during the preparation and development phases. These will now need to be revised and may include:

- **To maintain commitment from government sectors and agencies:** The NCC should consider arranging seminars, briefing sessions or some other form of direct communication with such agencies to ensure that those with grassroots responsibilities are fully engaged in the national action plan process.
- **To increase awareness to secure resources:** To ensure that the implementation of the NPA can attract the required resources, it is important that the decision-makers who are responsible for resource allocation are fully aware and understand what the Plan is addressing.
- **To inform sectoral groups and the general public about the NPA** and to encourage them to become involved in its implementation to influence government and those with responsibility for implementing it.
- **To inform people of the issues related to agrochemical management**, what the government and others are doing to improve the management of agrochemicals and how they can take action themselves to improve agrochemical management at the household, farm, local, national and regional levels.

4.2.2. Review communication stakeholders

Stakeholder involvement can also be reviewed ensuring the following groups have been identified:

- The potential beneficiaries of the NPA;
- Those who have a key role to play in protecting the environment and promoting sustainable development and improved agrochemical management;

- The general public who will draw some sense of satisfaction from the awareness that a national plan of action is in place that will enhance the security and well-being of all their fellow-citizens;
- The development and donor community, both as a potential source of technical cooperation and assistance and as part of the international environment that interacts with the country.

4.2.3. Review communication channels and dissemination options

The following series of questions can be used to update the most appropriate communications channels and media to use in order to achieve the communication objectives:

- How can the National Coordinating Committee make best use of the media?
- How can optimum use be made of existing media promotion units within stakeholders' agencies?
- Is there a need to recruit relevant personnel?
- What mechanisms are in place for monitoring the implementation of the Communications Plan?
- What are the basic channels of communication that the plan can enhance (but not replace)?

The dissemination activities should include an official launch of the NPA (Box 4-1). Activities can also include the production and distribution of brochures, leaflets and posters through government agencies and non-governmental organizations to their clients or sent directly to schools, community organizations and members of the public on request. Best possible use of modern information technology should be made as a means of dissemination. Consideration should be given to the establishment of a web-presence for the NPA and its activities.

Some other examples of effective communications channels and media include:

- Establishing good relations with the media;
- Media backgrounding, through both print and other media;
- Media releases;
- Media conferences;
- Interviews;
- Media coverage of events associated with the plan;
- Development of events specifically targeted at the media;
- Preparation and dissemination of print materials;
- Development of audio-visual materials

Box 4-1 Launching the National Plan of Action

A well-organized **launch** at the start of the implementation phase will make all relevant actors aware of the plan and its main elements, particularly their impact on specific sectors charged with its implementation. The general public will also be more aware of the plan if there is a high-profile launch.

The launch of the NPA could:

- Be a noticeable media event or involve the media
- Involve the Head of State or Government and relevant ministers
- Involve representatives of other political parties and other tiers of government
- Occur on a date that is significant (During Pesticides Awareness Week/World Pesticide Day)
- Be people-centred, i.e. involve representatives of various vulnerable or target groups such as farmers, children, youth, persons with disabilities, indigenous people and others

The involvement and endorsement of government leaders are crucial for the ultimate effectiveness of the NPA. This high level support for the NPA is required through the development and implementation phases but more so at the launch of the NPA.

MONITORING & EVALUATION

5. MONITORING AND EVALUTATION

5.1. Introduction

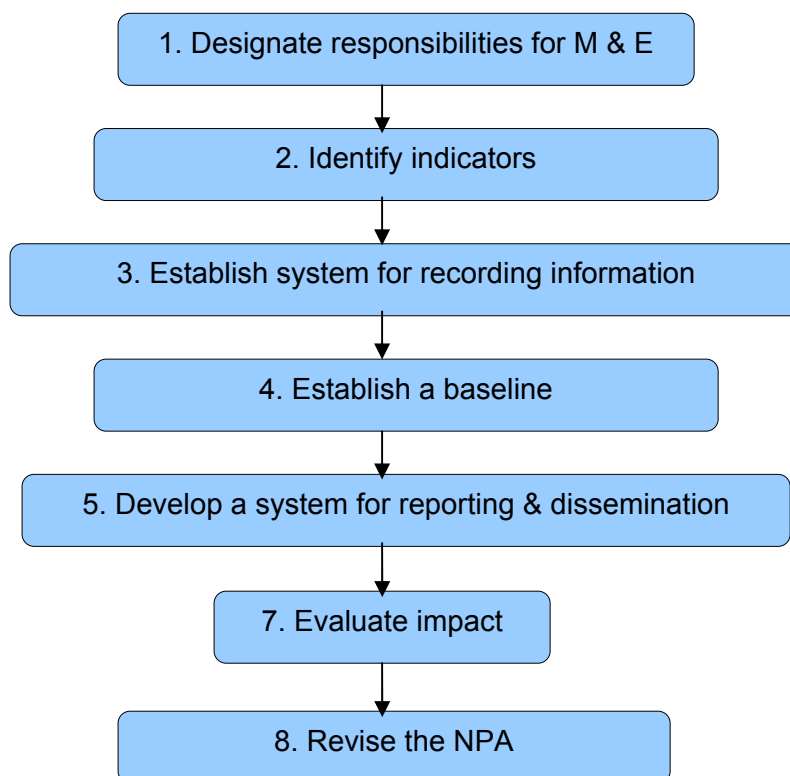
This section covers monitoring and evaluation requirements that run through the development and implementation phases. It also covers evaluation of the plan's impacts.

Monitoring the development phase of the National Plan of Action provides information required to measure progress, and provides key lessons for improving the process e.g. interacting with stakeholders, consensus building, collecting information etc.

Monitoring the implementation helps to see if the NPA is moving towards its goals and objectives. As a number of factors, such as time or costs, can affect the progress of a NPA, and an early-warning monitoring system provides the guidance for steering the plan back on track. It may also be necessary to regularly report the progress against indicators to the stakeholders involved, especially if they are providing resources to assist with the NPA.

Evaluating the impact of the NPA can provide evidence of the effectiveness of the plan in achieving its goals and objectives, and can give pointers to when certain objectives have been achieved allowing further or follow-on objectives to be taken on.

The following steps are required in designing and implementing monitoring and evaluation requirements. At the end of this section, Box 5-2 also illustrates the timing required for actions related to monitoring and evaluation.



5.2. **Designate body responsible for monitoring and evaluation**

From the point at which a national plan of action is proposed and developed, all players should accept that monitoring and evaluation mechanisms must be incorporated in the plan as an essential component. There is a column provided within the NPA framework to record selected indicators.


The NCC or other designated body should be the primary mechanism for maintaining an effective monitoring process. The committee should formalize these processes and maintain them throughout the implementation stage of the programme.

5.3. **Identify targets and indicators**

It is first important to clearly define the terms that are used in Monitoring and Evaluation. The terms used in this Tool Kit have the following definitions:

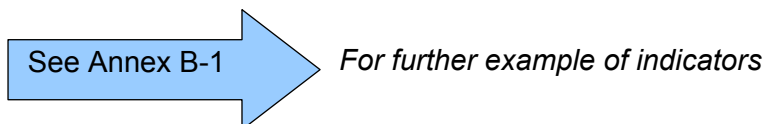
Indicators: Expected results of the activities undertaken in the national plan of action. These can either be output or outcome indicators.

- **Output Indicators:** are the expected products, goods or services that result from activities carried out.
- **Outcome Indicators:** are changes that have occurred as a result of the activities made.

 **Objective:** Establish a sustainable financing system by 2010
Output Indicator: Report produced with recommendations on sustainable financing by [date]
Outcome Indicator: A sustainable financed agro-chemical management system in place

Indicators for the NPA should be developed early during the development phase of the plan as the goals and objectives are being defined. If the indicators are well defined, they will assist in defining activities.

You will also need to develop indicators to chart progress of the development phase itself e.g. *Development and agreement on goals, objectives and indicators by key stakeholder by Jan 2006.*



5.4. **Establish a system for recording information**

It will be necessary to identify what sources of information are required for indicators and how this will be obtained. Important forms of data capture during the development and implementation phases (in addition to financial and administrative records), include:

- Review meetings
- Activity Reports of implementing agencies

- Progress Reports

There will need to be a system for collecting the relevant information, storing it (electronically or paper-based) and using it to measure indicators.

5.5. Establish a baseline

Measuring changes requires a baseline of the indicators before any activities occur so that it is possible to measure the progress. The situation analysis may provide most of the information for a baseline, but it may also be necessary to use further information collection means as suggested for each indicator.

Examples of tools for collecting further monitoring information include:

- Questionnaires (interview, telephone, email)
- Monitoring forms
- Active monitoring programme (i.e. may form part of a National Plan of Action as a specific activity)
- Literature review of a range of media (e.g. reports, speeches, press releases, newspapers, newsletter articles etc.)

5.6. Develop a system for reporting and information dissemination

To facilitate effective monitoring and evaluation, it will be necessary to develop a standardized reporting format and schedule e.g. annual. The reporting format will set out the goals, objectives and indicators and seek succinct information from the relevant agencies or organizations on how they have implemented activities during the period in question.

If some of the indicators were not met, the report should state this frankly and include an assessment of why it was not met and what should be done.

If the evaluation process demonstrates that targets have been achieved or exceeded, the coordinating committee and relevant agencies should highlight this in dissemination materials. Indicators can provide relevant messages in a simple, clearly and easily understood format. This can be integrated with other information from other components of the plan and assembled in such a manner to allow for comparisons and trends that will inform stakeholders.

5.7. Evaluate impact

It is important to conduct a more substantial and independent evaluation of the plan as a whole after a period of its implementation. The purpose of evaluation is to determine the degree of success of the plan in terms of achievements measured against objectives. It can also serve to justify the expenditure of the resources allocated to the plan.

Impact assessments are particularly difficult. The reader may also wish to refer to other guides on this subject. Please see the further reading section.

The evaluation will represent an important report to the government and the general public on the plan's outcomes. It will also be useful to other countries, which stand to gain from the experience of countries that have had plans in place for some time.

The evaluation should attempt to:

- Critically re-examine, in light of subsequent development, the stated rationale for the NPA;
- Determine the adequacy of the Plan to promote the desired changes;
- Compare the actual outcomes with the targets set and identify reasons for diversion;
- Assess the efficiency of the implementation process and managerial performance;
- Determine the effect and impact of the Plan;
- Present Lessons learnt and recommendations that follow from them.

Three simple questions can be used to guide the evaluation process:

- To what degree were the agreed activities implemented?
- Did these activities achieve the agreed goals, sub-goals and objectives?
- If not (to Qs 1 & 2), what further action is required?

This evaluation process can assist in updating or revising the NPA.

5.8. Revise the NPA

Information coming out from both the monitoring and evaluations may suggest the need for modifying and/or refocusing the Plan. The National Coordinating Committee should take the responsibility for developing mechanisms for revising the plan and conducting the actual revision.

Box 5-1 Monitoring and Evaluating the National Plan of Action

| Action | Development phase | Implementation phase | Post implementation |
|---|--|--|---|
| 1. Establish M&E body | At the outset of the planning/development phase | | |
| 2. Define targets and indicators | To be defined in conjunction with goals and objectives – can guide identification of activities | | |
| 3. Establish system for recording and capturing information | To be established from the outset from a combination of data from management systems and external sources, including commissioned studies. | | |
| 4. Establish baseline | Early during the development phase. This will draw on the situation analysis. | | |
| 5. Develop a system for reporting information | Standardised reporting formats should be defined early on for the core M&E activities. A reporting schedule must also be | In addition to quarterly, annual, mid term, end of activity reports, reports relating to specially commissioned impact | Reports relating to specially commissioned impact studies will relate to post |

| | | | |
|------------------------------------|---|--|---|
| | defined, e.g. quarterly and annual reports, mid term evaluation, end of activity reports, etc. | studies will relate to implementation. | implementation. |
| 6. Evaluate | After the situation analysis. | At defined stages during the implementation process related to the defined reporting requirements. The <i>outcomes</i> of implementation should be determined. Impact studies may be commissioned during the life of the NPA at key times to establish impact and <i>outcomes</i> . | Specially commissioned impact studies will indicate the <i>outcomes</i> of the NPA. Impact studies may occur after the NPA |
| 7. Report and disseminate findings | In addition to internal reporting requirements, messages relevant to stakeholders in the NPA process should be identified and disseminated via the planned communication activities and media plan. | In addition to internal reporting requirements, messages relevant to stakeholders in the NPA process should be identified and disseminated via the planned communication activities and media plan. | After the NPA is completed, messages relevant to stakeholders in the NPA process should be identified and disseminated via the planned communication activities and media plan. <i>Outcomes</i> will be particularly important. |
| 8. Revise NPA | | Internal monitoring e.g. mid term reviews, may suggest the need to revise the NPA. | |

Box 5-2 Timing for Developing and Monitoring NPA Indicators

| | When developed? | When monitored? |
|-----------------------|--|--|
| Development | Establishing the NPA Task force (or other NPA development mechanism) | Throughout the development phase |
| Implementation | When identifying Goals, sub-goals, objectives and activities | Throughout the implementation phase |
| Impact | When identifying Goals, sub-goals, objectives and activities | These longer-term monitoring should be part of the action plan. Towards the end of the Implementation Phase and continuing after implementation has ended. |