

**National Policy Dialogue
on Research and Technology for Development**

**Introduction
to
Assessment reports prepared in
Ghana, Senegal, Uganda and Vietnam**

by
Rutger Engelhard

for
European Commission
DG Development

&

the EU Informal Expert Group on RTD

European Centre for Development Policy Management
ECDPM, Maastricht
November, 2000

1. Introduction

Many ACP countries are actively involved in the process of defining the role of Research and Technology for Development (RTD) in their socio-economic development, all in their own way. The European Commission (EC), interested in promoting the strategic role of RTD in such development processes, has recently formulated a new policy for supporting efforts.¹ Approved by the Development Council in June 1997, and endorsed by the EU Parliament and the ACP-EU Assembly in March 1999,² this policy plan consists of two lines of action:

- 1 supporting RTD policy reform and capacity building in ACP countries, with special attention to ‘create a facilitating environment for science and higher RTD education’; and
- 2 strengthening research collaboration between the European scientific community and its partners in developing countries.

Given these EU and ACP policy intentions and the diversity of initiatives currently taking place in the field of RTD policy setting in ACP countries themselves, the Commission’s DG Dev wishes to begin a *policy dialogue on RTD reform* between the EC, the EU Member States, Norway and Switzerland, and the ACP countries. This dialogue should focus on five principal challenges:³

- 1 the development of *national RTD policies* in ACP countries for generating ‘contextualized’ knowledge and technology applications;
- 2 the formulation of *strategies for supporting institutional reforms of RTD infrastructures* and for *strengthening national RTD capacities* in ACP countries;
- 3 the identification of *innovative funding mechanisms* for developing and sustaining appropriate RTD infrastructures in these countries;
- 4 the *intensification of scientific cooperation* at national, regional and international levels;
- 5 the *better coordination of the EU’s position* in the relevant international RTD fora.

A great number of actors need to become involved in such a policy dialogue on RTD reforms in ACP countries, all of whom represent constituencies with widely different responsibilities, policy agendas, the scientific and commercial interests. EC’s DG Dev has asked the European Centre for Development Policy Management in Maastricht (ECDPM) to help prepare the ground for this policy dialogue on RTD reform, and to develop a replicable framework of objectives, structure and work procedures within which the various actors can meet.⁴

¹ Com(97) 174 final *Scientific and Technology Research – a Strategic Part of the European Union’s Development Co-operation in Developing Countries* (a communication from the Commission to the Council and the European Parliament, dated 25 April 1997).

² EU Parliament: Resolution A4-0089/99 on *RTD in development policy*, 9 March 1999; and ACP-EU Assembly: Resolution ACP/EU 2749/99/fin on *The contribution of research and science – including ICTs – to sustainable development*, 1 April 1999.

³ Com (97) 174 final, *ibid*

⁴ The objectives and approach of this project have been summarized in the report ‘Research and Technology for Development, support to the ACP-EU policy dialogue’, prepared by ECDPM for DG Dev and DGIS’ Research Programme (the project sponsor) in December 1999.

This report summarizes the conclusions and recommendations of four short studies assessing the *national policy dialogues on RTD* in Ghana, Senegal, Uganda and Vietnam. Chapter 2 presents the context of these studies and their rationale. Chapter 3 summarizes the findings and conclusions of these four studies. In the concluding chapter 4, the purpose of the intended discussion within the EU Informal Working Group on RTD on 24 November 2000 is discussed.

In concluding this short introduction, ECDPM would like to commend the researchers who carried out the four assessment studies – Professor Ernest Aryeetey, Dr Moussa K. Cisse, Dr Nguyen T. Ha and his team and Dr Alex R. Tindimubona – for their inspired and enthusiastic work and for providing candid insights into the national policy-making processes regarding RTD in their respective countries. Their individual country reports are:

- 1 Aryeetey, E. (2000) *The National Policy Dialogue on Research and Technology Development in Ghana*, ISSER, University of Ghana, Legon;
- 2 Cisse, M.K. (2000) *Étude sur le Dialogue Politique en Matière de Recherche et de Technologie pour le Développement, Cas du Sénégal*, ENDA, Dakar;
- 3 Ha, N.T. et al (2000) *The National Policy Dialogue on Research and Technology in Vietnam*, NISTPASS, Hanoi; and
- 4 Tindimubona, A.R. (2000) *The National Policy Dialogue on Research and Technology for Development in Uganda*, ASTEX, Kampala.

ECDPM would also like to thank Professor Wiebe Bijker and his team at Faculty of Arts and Culture of the University of Maastricht for his scientific guidance and advice during the preparations of these four assessment studies. He has summarized his advice in a separate report on the methodology of RTD diagnostic studies, i.e.

- 5 Bijker, W. et al (2000) *On a Methodology for RTD Diagnostic Studies in ACP Countries*, University of Maastricht, Maastricht.

These five reports and other relevant information on RTD policies in ACP countries can be obtained from the project's website at www.oneworld.net/thinktank/rtd.htm

2. National RTD policy dialogues

Donor agencies with an interest in supporting RTD reforms in ACP countries tend to commission so-called *RTD diagnostic studies* to provide guidance in focusing their aid policies. These studies – usually jointly undertaken by representatives of the RTD communities of the donor and ACP countries concerned – take stock of the building materials, with which national RTD systems have been built (such as national RTD (S&T) policy-making frameworks, legal instruments, priorities, research institutions and their capacities, stakeholders, and so on).

Almost without exception, RTD diagnostic studies paint depressing pictures of RTD systems in ACP countries. They point to national RTD policy priorities that exist 'on paper' only. They reveal weak lateral linkages between existing RTD institutes and their statutory organs, resulting in fragmented and uncoordinated RTD systems. They identify run-down research

institutes administered by grey-headed feudal lords of the national RTD community. They question the relevance of much of the research work because it has been carried out in isolation from the private and technology end users. They reveal that the research barons, stripped from regular public funding, choose to do their own business directly with research institutes in the North (and their donors). They explain that – in doing so – these dons bypass existing institutional policy setting frameworks and establish direct pipelines/conduits between their institutes and organization in the North through which resources and people flow without many people knowing. They emphasize that by implication research priorities of ‘external sponsors’ provide direction to the many research activities in ACP countries rather than national RTD policy agendas. In fact, they conclude that large parts of the RTD system have become accountable for their achievements and failures to ‘external sponsors’ rather than to national statutory bodies assigned with the supervision and coordination of the implementation of their work.

Most RTD diagnostic studies fall short in describing the national RTD policy-making process. Their reports are therefore limited to descriptions of RTD landscapes in ACP countries in a static and depressing manner (such as in the previous paragraph) rather than by analyzing the RTD policy making process and assessing the end-product of this process, the *national RTD policy agenda*.

For putting together a *national RTD policy agendas*, policy makers need professional inputs from the RTD stakeholders at various stages in the policy making process. Only with their views, insights and advice, the policy makers will be able (i) to ensure the relevance and feasibility of the national policy agendas and (ii) the support of those, who will actually implement them. This consulting and soliciting the views and opinions of RTD stakeholders during various stages of the national policy making process is referred to as the *national RTD policy dialogue*.

Whereas a policy making process is quite formalized, managed in stages and directed by procedures, a national RTD policy dialogue is a much more informal mechanism consisting of expert consultations, workshops, seminars, roundtable conferences and public debates in the media. A national dialogue may be started well before the commencement of the policy making process, and can even continue after the policy making process have been completed and the national RTD policy agenda endorsed by Parliament or by other appropriate statutory bodies of Government.

The national RTD policy dialogue plays a crucial role in any policy making process because it ‘brings together RTD stakeholders and solicits their views and advice.’ These RTD shareholders form a heterogeneous group of public authorities, research communities and institutions, institute of higher education, private sector organizations, NGOs and technology end-users and their associations. These organizations represent the whole political spectrum in a country and pursue widely different interest in any national policy agenda. In addition, their staff represent a wide range of social and professional strata, including top-level scientists, university administrators, corporate directors, but also leaders of grass root organizations, leaders of unions and farmers’ associations. These people enrich the policy

making process with a wide variety of professional insights, different levels of political sophistication and often conflicting policy perspectives.

If orchestrated well, a national RTD policy dialogue could do much more than gathering professional inputs into the policy-making process from RTD stakeholders. The dialogue process itself can be designed to work towards

- 1 formulating goals of the policy agenda which all stakeholders can endorse;
- 2 building consensus around RTD policy priorities; and,
- 3 developing implementation strategies that all can support.

In short, a national RTD policy dialogue is a mechanism that can facilitate RTD stakeholders in ACP countries to organize themselves around a common RTD policy agenda, with jointly defined priorities, that addresses actual development needs in their countries. In fact, a focused national RTD policy dialogue in ACP countries is a prerequisite for any *EU-ACP policy dialogue on RTD reform*. The conditions under which (i) developing countries can take ownership of jointly defined policy priorities and (ii) support for RTD reforms from the EC and EU Member States can be optimized can be only promoted on the basis of national RTD policy agendas that are widely supported by RTD stakeholders themselves.

From this perspective, the *national RTD policy dialogues* is a cornerstone of any replicable framework for an EU-ACP policy dialogue on RTD reform in ACP countries. Therefore, the project has carried out four short assessments of national RTD policy dialogues that have been conducted in Ghana, Senegal, Uganda and Vietnam. The choice of these countries was guided by criteria such as (i) ‘similar levels of socio-economic development’, ‘similar sizes’; but (ii) ‘different scientific cultures’ and ‘different recent histories’; and (iii) ‘the availability of RTD diagnostic study reports of recent date;’ and ‘the presence of highly qualified researcher, who is available to carry out the assessment at short notice’. In addition, the project decided to monitor the work of an ongoing RTD diagnostic study in the Dominican Republic that is locally funded by the EC and implemented with professional advice from ECDPM.

The University of Maastricht developed a methodological framework for the four assessment studies of the national RTD policy dialogues in Ghana, Senegal, Uganda and Vietnam. In this framework, the ‘RTD policy dialogue’ has been conceptualized around four basic elements:

- 1 the activity, i.e an ‘ongoing’ ‘open’ ‘learning’ ‘process’;
- 2 the actors, i.e the ‘RTD stakeholders’ and their ‘mutual power relations’;
- 3 the content, i.e the ‘issues that are being addressed’;
- 4 the level, i.e ‘intra-national’ ‘inter-regional’ and/or ‘inter-national’.

These four basic elements formed the basis of (i) the Terms of Reference for the four researchers in Ghana, Senegal, Uganda and Vietnam, and (ii) the methodological framework that they used to assess the national RTD policy dialogue in their respective countries. The methodological framework itself was developed in Bijker, W. et al (2000) *On a Methodology for RTD Diagnostic Studies in ACP Countries*, University of Maastricht, Maastricht.

3. Assessing the national RTD policy dialogues in Ghana, Senegal, Uganda and Vietnam

In four excellent reports, Professor Ernest Aryeetey, Dr Moussa Cisse, Dr Nguyen Ha and Dr Alex Tindimubona summarize their assessments of the past and ongoing national RTD policy dialogues in their respective countries. These accounts are exciting reading material. The researchers place the national RTD policy dialogues in their countries in an *historical perspective* and describe their *salient features*. They assess the ongoing policy dialogues and investigate to what extent the activity itself is an *ongoing, open learning process*. They summarize *lessons learned* and conclude with *recommendations* to be taken into account when designing a replicable framework for the EU-ACP policy dialogue on RTD reforms.

This chapter highlights some notable observations and conclusions from these four assessment reports; it is by no means a comprehensive summary of the four reports. The reports are obligatory reading for anyone who is or wishes to become involved in the EU-ACP policy dialogue on RTD reform. There is no other way to obtain a glimpse of (i) the richness of the RTD policy dialogues and RTD policy development processes that are ongoing in all four countries; (ii) the strengths and weaknesses of the institutional molds that have been developed to frame these processes; and (iii) the wide variety of issues that need to be addressed.

Historical context of current national RTD policy dialogues

In the early years of their independence (1950s-1960s), all four countries made noticeable efforts to develop an their own scientific and technological capacity to support socio-economic development efforts. As early as the late 1950s, Vietnam established a national coordinating agency for Science and Technology (S&T) that has been active ever since, even at the height of the American War. Senegal established a comparable managing body for implementing the government policies on S&T in 1960. Uganda and Ghana undertook similar initiatives in the mid-1960 and early 1970.

During the 1970s and 1980s, however, these early efforts to build up own S&T or RTD capacities were seriously thwarted. For this decline of their RTD systems the authors have sought explanations primarily in internal political developments: in Uganda, a total decline under President Idi Amin and successive regimes; in Vietnam, the American War and its inheritance of devastation; and, in Ghana and Senegal, the effects of economic stagnation and institutional instability. However, from the mid-1980s onwards, political interest in building national S&T capacities has been on the increase. For instance, in Vietnam, *Doi Moi* (the political renovation introduced in 1986) had a far-reaching impact on its S&T policies, which until then had been based on the Soviet science push model. In Uganda, President Museveni prepared the first draft of a national S&T policy (1971) while restoring an enabling political environment and reviving his country's socio-economic base. In Ghana, a full Ministry of Environment, Science and Technology with cabinet status for its minister was created in 1992.

In the 1990s, Structural Adjustment Programmes had annihilating effects on national RTD capacity development (mentioned by all but one author). Nevertheless, RTD policy development has recently again gained considerable momentum in three of the four countries. In Senegal, a series of national workshops on the role of Science and Technology in Development attracted considerable political attention (1998). In Vietnam, the Eighth Congress of the Vietnam Communist Party endorsed the so-called 'S&T' resolution (late 1996). Subsequently, Vietnam's National Assembly passed the so called 'S&T Law' in 2000, and the Government drafted its 'Strategy for Development of Science and Technology up to the year 2020'. In Ghana, the 'National Human Development Report 2000' opted to concentrate on 'Science, Technology and Human Development'. This focus led to discussions among human development experts about how science and technology could best be applied to accelerate the process of building human capital. In addition, the Government earmarked RTD as one of its policy priority areas in the upcoming Medium-Term Development Plan (2001-2005).

These past and recent developments are highlighted in this summary report in order

- 1 to portray the active political interest in RTD in the countries surveyed. In Vietnam, Ghana and Senegal, S&T or RTD *policy development processes* supported by *national RTD policy dialogues* are tangible evidence of this growing interest among RTD stakeholders. Even in Uganda, where the situation may have to be assessed differently, Dr Tindimubona has identified a considerable number interesting RTD initiatives: 'I found that, on the one hand, Uganda is a typical poor ACP country in which there is not much RTD, not much RTD policy, and not much dialogue about that policy. Yet, at the same time, it is also a country in which the little RTD policy dialogue that is happening is channeled through highly unconventional mechanisms, with a few flashes of brilliance and exciting pointers towards a possibly innovative model of a dynamic RTD policy dialogue in an ACP context'.
- 2 to point to the enormous ground that these countries have to make up as a result of the destruction of the existing RTD systems and infrastructures that occurred in the 1970s and 1980s, and of the impact of the more recent Structural Adjustment Programmes; and
- 3 to emphasize the need to recognize that (i) each of these countries has a past that determines to a large extent current (and future) RTD policy opportunities and preferences and implementation obstacles, and (ii) the EC and EU Member States have to become more aware of the past events in each of these countries in order to be able to engage in a meaningful policy dialogue on RTD reform.

Salient features of current national RTD policy dialogues

From the four assessment studies, a great variety of ways in which national RTD dialogues can be and are being organized is emerging. This summary discusses only a few salient characteristics of these dialogues.

Institutional arrangements to encourage and coordinate the policy dialogue

In all four countries, governments have made specific institutional arrangements to encourage and coordinate the national RTD policy dialogue. In Vietnam, the RTD policy-making process and the national policy dialogue activities are intricately entwined. An elaborate and highly formalized bureaucratic structure is in place to ensure that at appropriate moments in the policy-making process a national policy dialogue is promoted to gather the opinions, suggestions and advice of relevant organizations and individual experts (through seminars and workshops, or the circulation of draft policy documents or position papers).

In the African countries, the RTD policy-making process and the national policy dialogues are less closely interwoven. Governments have commissioned specific bodies (such as a Science and Technology Policy Research Institute, an Interministerial Committee on Scientific and Technical Research or a Council for Science and Technology Research) to coordinate the national RTD policy dialogue. However, the policy dialogue is rather informal and of an ad hoc nature, its occurrence dependent on 'events'. In Ghana, the focus on 'Science, Technology and Human Development' of the National Human Development report 2000 and the drafting of the Medium-Term Development Plan 2001-2005 have recently resulted in a plethora of workshops on the role of RTD in various development processes, and of discussions in cross-sectoral planning groups on whether or not RTD should become a priority policy area of the Government. In contrast, in Uganda and Senegal the current national RTD policy dialogue is rather numb and both reports reproach the coordinating bodies for this situation. It is argued that these bodies may have functioned correctly in the past but that for some years they have experienced a kind of lethargy, exacerbating coordination and articulation problems between the various components of their national RTD systems. The fact that some of these coordinating bodies have been using their position to become themselves national focal points of prestigious international collaborative research programmes have certainly added to these problems.

Coordination problems between various hierarchical levels and among various RTD stakeholders

All four reports, but in particular the African country reports coordination, point to problems between various hierarchical levels in the national policy dialogue and among the various RTD stakeholders that participate. Typically, one or more RTD policy issues are discussed in workshops or seminars. The conclusions and recommendations formulated by these workshops are subsequently taken up one step higher in the (government) hierarchy, for instance by a cross-sectoral planning group or a national advisory committees, and so on. Policy planning workshops are welcome but rare occasions to meet other RTD stakeholders for a joint exploration of scenarios for institutional reforms required to give RTD its proper function in development processes. However, in the absence of national networks of RTD stakeholders, lateral linkages are structurally weak. Consequently, follow-up activities are rare, and the participants of those workshops tend to continue to follow their own traditional paths. An additional problem is that conclusions and recommendations of such workshops, when communicated upwards through the hierarchy, are being discussed in groups that consist of totally different people. Often, these new groups, e.g. those working on the formulation of draft policy implementation plans, do not know or understand the details of the arguments underlying the conclusions that have been brought to them. Thus, the

recommendations by workshops at earlier stages in the process are thrown overboard. What is being worked out now is a policy implementation plan that does not include the opinions and advice from these earlier groups. The country report of Ghana clearly shows that if such coordination problems are not adequately addressed, RTD stakeholders may rightly start questioning the relevance of their participation and may lose faith in the applicability of the final outcome of the policy-making process.

Such coordination problems are also frequent in complex policy dialogue processes in Europe, and are by no means unique to ACP countries.

Participation of RTD stakeholders, in particular the private sector

Since the mid-1990s, any national RTD policy dialogue has been required to take into account the needs (and resources) of the private sector. The underlying reason for this recent priority is the belief among policy makers that public-private partnerships are promising new funding mechanisms for research in ACP countries. In all four reports, the involvement of the private sector (and other technology end-users) is assessed to be insignificant. In spite of some very interesting examples of public-private research partnerships, private sector participation in ongoing RTD policy dialogues is minimal. The reports present long lists of reasons for the apparent absence of the private sector:

- 1 the weak linkages between research institutes and productive sector organizations;
- 2 the private sector is not interested in becoming involved out of fear to be obliged to share the results of their own research, which they consider to be 'trade secrets' (intellectual property rights);
- 3 without ready access to venture capital it is difficult for the private sector to exploit commercially new technologies, so why bother to participate?; or
- 4 industrial enterprises wholly owned by foreign corporations do not engage in technology transfer to any significant degree, let alone in contributing to an RTD policy dialogue; and so on.

Consequently, in all four countries the active participants in the national policy dialogue seem to be limited to the research community and relevant government departments.

Many more salient features of current RTD policy dialogues have been registered in the four assessment reports. Above three features are highlighted in this summary report

- 1 to emphasize the importance of strong 'bodies' – with sufficient credibility among Government Departments and RTD stakeholders – that have been mandated by the Government to coordinate the national RTD policy dialogue;
- 2 to point to the need for proper organization of the policy dialogue, and for careful orchestration of its various activities (expert consultations, workshops, conferences, etc.), both at the level of keeping the dialogue process in tune with policy-making processes and at the more mundane level of compiling adequate distribution lists for workshop proceedings and of the planning (and actual implementation) of regular reporting and feedback loops to all parties involved; and.
- 3 to illustrate how easy it is to make private-sector participation a paper-priority issue in national RTD policy dialogues, but how difficult it is to implement this priority in practice. The private sector has little interest in funding research in ACP countries. Whereas some firms may show interest in collaborating in specific research projects,

or in buying specific research services and consulting services from individual research institutes, they are definitely not yet prepared to spend the time (nor the funds) to pursue active participation in a RTD policy dialogue, or to enter into commitments which such involvement may demand.

Aspects of an open, learning and ongoing process

The four researchers were asked to look in particular into the qualitative aspects of the national RTD policy dialogue in their countries, and in particular into issues such as *openness* (policy goals and priorities are amenable to revision during the dialogue); *learning* (the policy dialogue has means to make its arguments, decisions, results, etc., widely available); and *process* (focus on both the process of reaching decisions on RTD policy and the formulation of the policy itself).

Openness

All four reports provide evidence that the approach adopted in the national RTD policy dialogues of today is much more open than in the early years after their independence. Today, the procedures are flexible and the policy goals and priorities not fixed at the outset, but are amenable to revision and even radical change during the course of the dialogue. In this context, the Ghana report points out that the degree of ‘openness’ of the process is limited to what are described as ‘stakeholders’. In 1998, a S&T policy document was prepared for the then new Ministry of Environment, Science and Technology. The areas of RTD covered in this document are narrow (Information and Communication Technology (ICT) is even not mentioned), due to the narrow definition employed for ‘stakeholders’, which led to a domination of the process by researchers and technocrats belonging to one specific sector of the RTD community, and to the consequent exclusion of other sectors and of non-scientists. In this context, the Vietnam report also points to recurrent difficulties for those who are not directly approached by the ‘organizing committees’ to express their opinions and to comment on policy drafts.

All four reports comment on the slim chances for the ‘wider public’ to become involved and express their opinion effectively. Mass media in general, and the press in particular, may be made part of the consultative process, but in none of the four countries have they contributed to broader, public discussions about RTD in development processes. The press usually reports on (some of) the proposals that arise from the dialogue, but makes little effort or no to stimulate public debate. As the Ghana report summarizes it: ‘Indeed, underlying the mode of [the policy dialogue] has been the presumption that non-stakeholders would not be interested in the issues’.

Learning

The Vietnam and Ghana reports present a number of interesting views on this aspect of national RTD policy dialogue. In general, an organization that plans, orchestrates and coordinates the policy dialogue need reliable means to record and distribute arguments, decisions and other results of the various consultations, workshops and other discussion fora. In particular, the ‘mode of dialogue’ needs to include feedback systems that allow for ‘old’ information to be processed faster, and for ‘new’ information to be internalized. From Vietnam, much can be learned about how recording and distribution can be efficiently

organized. From Ghana, many lessons can be learned about ways to organize the ‘entire process’ of a policy dialogue and about the need for making concrete proposals for that.

Ongoing process

The country reports argue extensively that national policy dialogues are processes that need time and much effort by both the coordinating institutes/committees and the participating stakeholders to keep them going. The Vietnam report emphasizes an aspect of national policy dialogue that is often overlooked, i.e. consensus building among a wide variety of stakeholders around a number of common policy priorities. Consensus among RTD stakeholders with widely different agendas and interests takes time.

In this context, all four reports raise the issue that most national RTD policy dialogues heavily depend on donor funding for their activities (diagnostic studies and expert advice, national RTD workshops, cross-sector roundtable conferences). RTD stakeholders, consulted in the context of these country studies, tend to regret this dependency, in particular because they consider the donors’ policies of short-term and activity-focused funding as one of the principal reasons for the recurrent discontinuities in the national RTD policy dialogues and for failures to follow the process through to the end.

Again, the four reports together contain enough material for a textbook on organizing and coordinating national policy dialogue processes. This summary can not possibly do justice to the wealth of detail and practical examples that have been compiled by their authors. The above issues have been selected for this summary report in order

- 1 to look at the necessity to become clear as to which institutes, organizations and individuals are considered to belong to the group of ‘RTD stakeholders’; and at the need to define more precisely the role of the mass media, and in particular the press, in involving the ‘wider public’ in the process;
- 2 to emphasize the fact that in many countries important ‘lessons have been learned’ as to the ‘how’ of organizing and coordinating national RTD policy dialogues; and, that these ‘lessons learned’ could be applied elsewhere;
- 3 to reflect on donors’ funding policies in an effort to adjust them to the particular needs of national policy dialogues in ACP countries.

A summary of some recommendations by the researchers

The researchers were asked to consult RTD stakeholders as to strategies to improve the national RTD dialogue in their countries. Many of the recommendations are understandably ‘country-specific’ and their true value can only be recognized after reading the reports (another reason to read the four country reports!). In this section, the more general recommendations have been taken from the reports for further consideration and discussion.

- 1 Aryeetey recommends that the national RTD policy dialogue needs to be conceptualized as an on-going process of ideas being developed with as wide a participation as possible and no limitation of issues to be covered;
- 2 This general recommendation gains weight if combined with those of Tindimubona, who states that political and media support for national RTD policy dialogues needs

- to be raised and incentives be introduced to encourage the private sector to start contributing to the dialogue process, and subsequently to national RTD systems;
- 3 In this context, Ha recommends that discussions with economists, the business community and NGOs (especially those working at the grassroots level) should be given more appropriate attention, so that scientific and technological priorities can be integrated more closely with the country's socio-economic development;
 - 4 Cisse recommends that efforts should be increased to implement coherent policies of technological innovations transfer towards the private sector, in particular towards industry; and
 - 5 Cisse also stresses the need for a new, systemic vision of RTD and RTD policy-making that includes local concerns and regional and international perspectives. He makes this recommendation expecting that linear and sequential perceptions of links between research and development will soon be fully abandoned; and that centralized government organs that direct national RTD policies will increasingly be replaced by more decentralized, flexible policy-making mechanisms.
 - 6 From Cisse's perspective, Ha's recommendation becomes more than just a practical advice: 'international agencies and foreign institutions should be involved in a more pro-active manner, for example by inviting them to participate in policy discussion meetings [...], rather than only seeking reference material from them.'
 - 7 In conclusion, all four report contains numerous, sometimes very practical, recommendations as to how the national RTD policy dialogue as an *open, learning* and *ongoing process* can be improved.

4. Context and purpose of the discussion of the EU Informal Expert Group on RTD on 24 November 2000

The EC has formulated four principles that should guide the intended the EU-ACP policy dialogue on RTD reform:⁵

- 1 *partnership* at both policy and operational levels, promoting conditions under which (i) developing countries can take ownership for jointly defined policy priorities and (ii) effective implementation of EU actions can be optimized;
- 2 *differentiation*, taking into account the diversity of needs in and cooperation arrangements between countries;
- 3 *integrated approach* to solving specific problems, requiring close liaison with – and intensive interdisciplinary collaboration between – the producers of scientific and contextualized knowledge (in universities and research institutes) and those involved in its transfer and end-use (Government service organizations, NGOs and various socio-economic groups of end-users); and
- 4 *mainstreaming* of RTD as an integral part of all development policies and programmes.

⁵ EC/DG VIII (1999) *Issues and Options for European Support to research and technology Development (RTD) in Developing Countries, proposal for common actions*, paper prepared for the Informal RTD Expert Group of the Commission, Member States, Norway and Switzerland, by EC/DG VIII, Economic and Trade Cooperation, NT, Info Society and R&D, Brussels, 6 May 1999. *ibid*

These four principles also guide the process of the development of the framework itself, of the structure for an EU-ACP policy dialogue on RTD reform and of procedures that make the structure work. The EU Member States, Norway and Switzerland and ACP countries should be able to take joint-ownership of this framework; and, the framework itself should make it possible to adopt an integrated approach and to take into account the diversity of needs in and cooperation arrangements between countries.

The four country reports form a principal input into four discussions, planned to take place in different settings. The conclusions and recommendations of these meeting will determine to a large extent the structure and the procedures of the framework for the EU-ACP policy dialogue on RTD reform. These discussions are:

- 1 **23 November 2000: a one -day working session**
 - **Participants:** the researchers from Ghana, Senegal, Uganda and Vietnam; the project's Steering/Advisory Committee; and the project team.
 - **The key issue that needs to be addressed:** *Given the insights provided by the four assessment studies, what are the actions to be undertaken and preparations to be made by an ACP country (or group of ACP countries) before it (they) can enter into a policy dialogue on RTD reform with the EC and EU Member States, Norway and Switzerland?*
- 2 **24 November 2000: a meeting of the EU Informal Expert Group on RTD**
 - **Participants:** EC; members of the EU Informal Expert Group on RTD; the researchers from Ghana, Senegal, Uganda and Vietnam; and the project team.
 - **The key issue that needs to be addressed:** *Given the insights provided by the four assessment studies, what are the actions to be undertaken and preparations to be made by the EC and the EU Member States, Norway and Switzerland before they can enter into a policy dialogue on RTD reform with an ACP country (a group of ACP countries)?*
- 3 **24-26 January 2001: an international RTD workshop in Ghana**
 - **Participants:** representatives from RTD communities in Dominican Republic, Ghana, Senegal, Uganda, Vietnam (2 from each country); EC delegations in Dominican Republic, Ghana, Senegal, Uganda and Vietnam; and the project team
 - **The key issue that needs to be addressed:** *Given (i) the insights provided by the four assessment studies and (ii) the conclusions of the meetings on 23 and 24 November, what would be an appropriate structure of an EU-ACP Policy dialogue on RTD reform in an ACP country (or group of ACP countries) and which procedures need to be in place to make this framework actually work.*
- 4 **23-25 April 2001 (Sweden): a meeting of the EU Informal Expert Group on RTD**
 - **Participants:** representatives from RTD communities in Dominican Republic, Ghana, Senegal, Uganda, Vietnam; EC; members of the EU Informal Expert Group on RTD, and the project team
 - **The key issue that needs to be addressed:** *Presentation and discussion of the framework for an EU-ACP policy dialogue on RTD reform.*