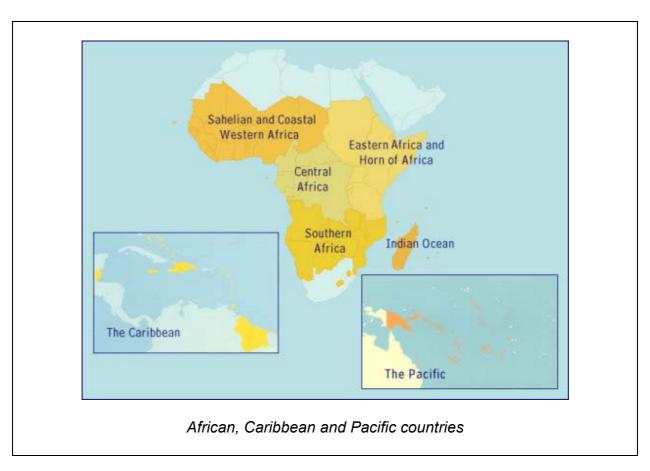


## Science and Technology for ACP Agriculture



# The role of Science and Technology in the Cotonou Partnership Agreement: an initial assessment



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Maastricht, The Netherlands, January 2003

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#### 1. Introduction and methodology

The Western or Northern world has identified Science and Technology (S&T) as important in the development of humankind and society. Shrum and Shenhav<sup>4</sup> discuss the role of or Research and Technology for Development (RTD)<sup>5</sup> and question whether S&T are the catalyst for economic growth and development in developing countries as it is often assumed. Bijker, Engelhard and Box have argued that technology policy dialogue is an essential condition to spur sustainable S&T development. Following this theoretical debate, the present report focuses on the policy dialogue between the group of African, Caribbean and Pacific (ACP) countries and the European Union (EU) in the context of development cooperation. The cooperation is formalized by the Cotonou Partnership Agreement (CPA) that started being ratified by the ACP and EU countries in 2000<sup>6</sup>. This paper reviews the formal role of S&T in the specific country strategy papers under the Cotonou Agreement and analyzes its relation to other priority sectors.

Assigned by CTA, the report forms a part of a greater inventory and policy analysis of Science & Technology policy plans of ACP countries. According to the *Human Development Report 2001*, 'new technologies' – i.e. biotechnology, genetics, biomedical technologies, energy technologies, remote sensing technologies and information and communication technologies – have regenerated political interest in the potentials of S&T for the development. These technological innovations are taken into account in the analysis as well as the key words 'science', 'technology' and 'research', including all their linguistic relatives (e.g. 'scientific'). Moreover, special attention is given to S&T in an agricultural context.

The central question of this report is therefore: to what extent figure S&T plans in the ACP-EU formal and actual policy dialogue? Before starting the analysis in chapter 3, the second chapter gives background information on the Cotonou Partnership Agreement and on S&T in order to contrast formal and actual realities. The next part describes the methodology of the analysis of the S&T contribution in Country Strategy Papers (CSPs), undertakes the interpretation and finally discusses and presents the

<sup>&</sup>lt;sup>4</sup> In Bijker (2001), p. 17f.

<sup>&</sup>lt;sup>5</sup> To simplify matters, the author uses the term "S&T" or instead of both "S&T development" and RTD from here onwards

<sup>&</sup>lt;sup>6</sup> Cotonou Partnership Agreement in http://www.acpsec.org/gb/cotonou/ratifice.html.

results. A bibliography and a list of acronyms can be found at the end of the document. Please note that not all CSPs have been used in this report, but only the ones that have been approved by the European Commission and have been published.

#### 2. Background descriptions

After several decades of ACP-EU development cooperation under the Lomé Conventions, the 78 ACP countries adopted the so-called Libreville Declaration in 1997. It aimed to improve development cooperation between African, Caribbean and Pacific (ACP) states and the European Union (EU). The Libreville Declaration "places greater emphasis on the development of our human resources, on enhanced access to science and technology, especially on information technology and the financing of research relevant to our socio-economic development". Primarily, it stresses the dedication "to master information technologies and develop infrastructure, particularly telecommunication informatics".

The Cotonou Partnership Agreement (CPA), the successor of Lomé IV, follows in various articles (e.g. 23j, 33b, moreover 21d, 23e 28c, 30a, 33a, 13(4) and 43)<sup>9</sup> the appeal of the Libreville Declaration. Article 23j states for instance that the cooperation should support the 'development of scientific, technological and research infrastructure and services, including the enhancement, transfer and absorption of new technologies'. Article 33b aims to improve the 'capacity to analyze, plan, formulate and implement policies, in particular in the economic, social, environmental, research, science and technology and innovative fields'.

Other references or partial references are made in the following articles:

 general approach: cooperation shall promote the free movement of persons, goods, services, capital, labor and technology among ACP countries (28c); in general the recognition of the important role of Information and Communication Technologies and the participation in the Information Society (43).

<sup>&</sup>lt;sup>7</sup> Libreville Declaration in http://www.acpsec.org/gb/declar/final\_gb.htm.

<sup>&</sup>lt;sup>8</sup> Libreville Declaration in http://www.acpsec.org/gb/declar/final\_gb.htm.

<sup>&</sup>lt;sup>9</sup> Cotonou Partnership Agreement in http://www.acpsec.org/gb/cotonou/accord1.htm.

- regional cooperation: infrastructure particularly transport and communications and safety thereof and services, including the development of regional opportunities in the area of Information and Communication Technologies (ICT) (30a);
- economic sector development: economic and technological infrastructure and services, including transport, telecommunication systems, communication services and the development of the information society (23d);
- inter-firm linkages: networks and cooperation including those involving the transfer of technology and know-how at national, regional and ACP-EU levels (21d);
- *migration*: to facilitate students to education, especially through new communication technologies. (13(4));

Summing up, S&T plays a significant role in various articles of the Cotonou Agreement.

According to the Agreement, ACP governments or their National Authorizing Officers (NAOs) would produce Country Strategy Papers (CSPs), which outline the Country Support Strategy (CSS) and the National Indicative Papers (NIPs). The CSSs outline and assess the country's development strategy, analyze its situation and suggest an EU response to a limited number of sectors, taking the role and activities of other donors into account. In the NIPs, the focal sectors would be defined the amounts of money to be allocated. In other words, they set the priorities for cooperation between the EU and the respective country. The next chapter has a closer look at the actual appearance of S&T in the CSSs and NIPs.

#### 3. Analysis of CSPs

The methodology of the analysis is as follows:

- 78 countries establish the ACP group.
- By the time of inquiry<sup>10</sup>, 52 Country Strategy Papers had been officially published on the European Commission's website.
- In each of the papers, the appearance and priority setting of the policy sector S&T were reviewed and their components in both CSSs and NIPs as mentioned earlier.
- The various S&T sectors found were ranked by priority: very high priority (exclusive focal sector), high priority (focal sector) and low priority (non-focal sector or part of other sector).
- \* During this process, two difficulties occurred. First, the differentiation and identification of the keys occasionally turned out to be complex. One example is the classification of agriculture which can be related to both the usual category "agriculture and food security" and to "Science and Technology", if referred so. In this case, nor only the agriculture category is indicated, but also the technological part of agriculture is indicated in the S&T category. This method reflects the complexity of the various policy sectors. Second, in some cases S&T was merely mentioned and given minimal priority. Nevertheless, these minor contributions were recognized in order to mirror the distribution as much as possible. After reviewing the papers, the results were translated into percentages. A second step was to illustrate the share of the different S&T sub-sectors.

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<sup>&</sup>lt;sup>10</sup> January 2003.

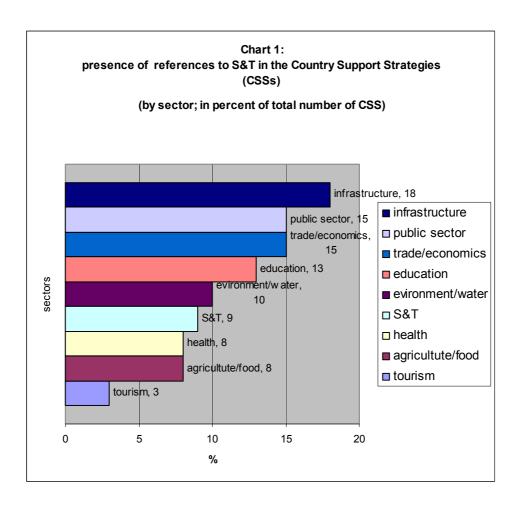
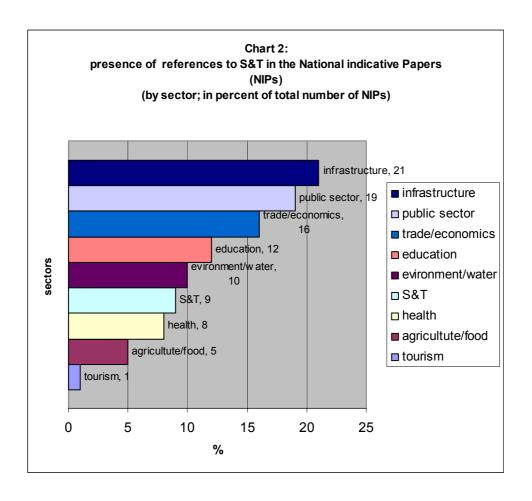
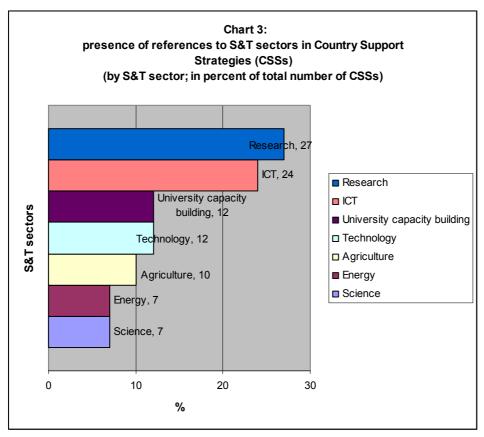


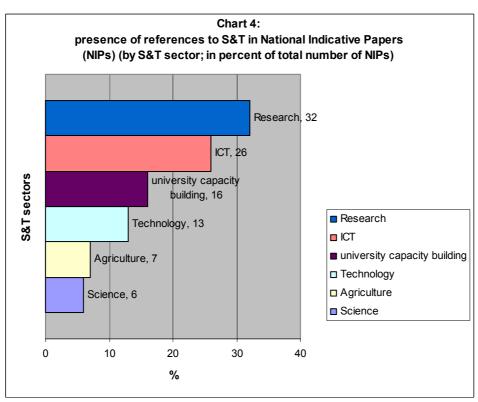
Chart 1 "Presence of references to S&T in the Country Support Strategies (CSSs)" shows that the sectors "infrastructure" (18%), "public sector" (15%) and "trade and macroeconomics" (15%) have highest priority. S&T only figures sixth being mentioned in only 9% of the policy plans. Although 22 out of the 52 countries mentioned S&T components in their CSS, the contribution is rather small in most cases. Only Trinidad and Tobago and St Kitts and Nevis, mention S&T as a focal-sector. In fact, the term "Science and Technology" was rarely used in the CSSs. Still, S&T does play a minor role in CSPs.



The trend noted in the analysis of the CSSs, can also be found in chart 2 "Presence of references to S&T in the National Indicative Papers (NIPs)". Again, the traditional sectors of EU-ACP development cooperation like "infrastructure", "public sector" and "trade and macroeconomics" dominate. And again, "S&T" figures on the sixth place with 9% of the share. 19 countries refer to S&T components, and once again these references are mixed. Three strong cases are Trinidad & Tobago, St Kitts &Nevis and Grenada who mention S&T as a focal sector. And again, in other NIPs the term "S&T" was hardly used.

To sum up, only three NIPs mention S&T. References to S&T in other NIPs are few and far between.





Subdividing the S&T sector (see charts 3 and 4), the research element constitutes one third of the total, ICTs a quarter, followed by university capacity building, technology, agriculture and science. It is not surprising that the "research" component is big, because 14 countries allocate parts of the budget into research projects, even though mainly minor projects are funded. An exception is Grenada that made research part of a focal sector. Only five states referred to S&T in agriculture:

- Belize: introduction of technology in general,
- Ghana: capacity building for inter alia post harvest research organizations,
- Guinea: technical education in agriculture,
- Madagascar: improve the criteria of technical viability in hydro agriculture,
- Vanuatu: on-going research and development programs.

It is noteworthy that the technological sectors: biotechnology, genetics, biomedical technologies and remote sensing technologies were not mentioned in any CSP.

#### 4. Conclusion

The question of this report was, to what extent Science and Technology policies figure in Country Strategy Papers.

Formally, S&T is a sector that can receive development support under the Cotonou Partnership Agreement. A few countries used this opportunity in their strategy papers, although references to S&T are rather scant. Only few countries give priority to S&T.

Only some states make use of scientific research for certain programs. S&T in agriculture is only mentioned by five countries, in all cases in a minor role. In other words, the actual S&T policy priority in 52 countries is strikingly low, considering the importance attached to it in the Libreville Declaration.

A variety of EU-ACP policy dialogues dealing with S&T have taken place, as reported at the "Demanding Innovation" conference in Maastricht, the Netherlands, in

October 2001. Case countries like Ghana, Uganda and Senegal have not prioritized S&T.<sup>11</sup> That shows a discontinuity of effort.

The overall conclusion must be that Science and Technology play a subordinate role in EU-ACP cooperation, despite initial lip service to its importance.

<sup>&</sup>lt;sup>11</sup> The CSP of Senegal has not been published yet.

### 5. List of acronyms

ACP African Caribbean Pacific

CSP Country Strategy Paper

CSS Country Support Strategy

EU European Union

ICT Information and Communication Technologies

NAO National Authorizing Officer

NIP National Indicative Paper

RTD Research and Technology for Development

S&T Science and Technology

UNDP United Nations Development Program

#### 6. Bibliography

- Bijker, Wiebe B., Research and Technology for Development (RTD) through a EU-ACP Policy Dialogue, Maastricht University, 2001, in http://137.120.191.76/public/websites/bijkernieuw/RTDreport.pdf.
- Cotonou Partnership Agreement in http://www.acpsec.org/gb/cotonou/accord1.htm.
- Country Strategy Papers in http://europa.eu.int/comm/development/strat\_papers/index\_country\_fr.htm.
- Libreville Declaration in http://www.acpsec.org/gb/declar/final\_gb.htm.
- African, Caribbean and Pacific countries (map on front page) in http://europa.eu.int/comm/development/region/reg\_en.htm.