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  QUESTIONS: REPORTS OF
  SUBSIDIARY BODIES,
  CONFERENCES AND RELATED
  QUESTIONS: SCIENCE AND
  TECHNOLOGY FOR DEVELOPMENT

United Nations system support for science and technology in Africa

Note by the Secretary-General

Addendum

The Secretary-General has the honour to submit to the General Assembly and the Economic and Social Council the comments of the Administrative Committee on Coordination on the report of the Joint Inspection Unit entitled "United Nations system support for science and technology in Africa" (A/50/125-E/1995/19, annex).

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ANNEX

Comments of the Administrative Committee on Coordination on
the report of the Joint Inspection Unit entitled "United
Nations system support for science and technology in Africa"

I. GENERAL COMMENTS

1.   The subject under examination in the report of the Joint Inspection Unit
(JIU) is the evaluation of the United Nations system support for science and
technology in Africa. Since the adoption in 1979 of the United Nations Vienna
Programme of Action on Science and Technology for Development, 1/ this subject
has featured consistently on the agendas of central United Nations
intergovernmental bodies, thus indicating the importance that Member States
assign to science and technology issues. The Inspectors, on the basis of their
field investigations and discussions with project operators and end-users on the
subject of the information supplied by executing agencies and the review of
project documentation, have come to the conclusion that the response of
organizations and agencies of the United Nations system in supporting the
implementation of the Vienna Programme of Action has not matched the
expectations and needs of many developing countries. In the view of the
authors, the significant international financial support anticipated by the
Programme of Action has not materialized; the science and technology policies
and programmes of the United Nations system are hardly coordinated around
strategic goals; institutional and programme adjustments are inadequate and a
common operational science and technology framework is absent. Based on their
assessment and a review of the projects being executed in the African region,
the Inspectors have made a number of recommendations aimed at enhancing the
effectiveness of the United Nations system support for science and technology
in Africa.

2.   The Administrative Committee on Coordination (ACC) has found the topic of
the report of great importance and interest to the United Nations system and in
particular to those organizations and agencies involved in development
assistance and transfer of technology to developing countries. The Committee
has noted that the report has attempted to address the activities of the United
Nations system in support of endogenous science and technology capacity-building
in developing countries, but, in view of the complex and extensive nature of the
subject, the focus has been narrowed to science and technology institution-
building. The authors of the study have also attempted to develop a methodology
in that regard. Despite the intent to restrict its focus, the report
nevertheless details complex and wide-ranging issues - from specific problems of
the transfer of technology to the general difficulties of institution-building
and of the current development context in the African region.

3.   Members of ACC consider the study to be a very thorough, informative and
valuable one, highlighting the issues that deserve critical and timely
consideration by the United Nations agencies working in the area of science and
technology for development in general and on the African continent in
particular. Most of them believe that its focus on institution-building efforts
for science and technology for development is most appropriate, in so far as

many current initiatives and actions in that field tend to focus on skills
acquisition to the neglect of institution-building, which is a vital element in
the spread, adaptation and utilization of science and technology.

4.   Some members of ACC stressed, as a positive moment of the report, the
attempt of the authors to embed technological development in its social,
economic and cultural context, with the intention to bridge questions of
technological development with those of human development.

5.   ACC supports the general thrust of the conclusions and recommendations,
which are generally constructive and fair and, in the view of the Committee,
have been framed to some extent to link up with current priorities and trends of
the United Nations system, such as sustainability, programme approach,
participation of beneficiaries, national execution and regional cooperation and
integration. It also agrees with the authors that a lot could and should be
done to improve the activities of the United Nations system as part of the
solution of this important problem. However, in some instances, the report was
found to contain a number of shortcomings, which, to some extent, diminished the
value of the study.

6.   First of all, some members of the Committee question the decision of the
Inspectors to evaluate only the institution-building projects. Moreover, even
in the case of agreement with such an approach, some agencies comment that the
concept advanced by the authors mixes issues related to the set up and operation
of institutions, on the one hand, and those concerned with the support extended
to an institution during its establishment or strengthening phase, on the other.
They consider it very important to distinguish between these two aspects in
order to ensure the later sustainability and independence of such institutions.
One organization commented that even if the selection of projects dealt with in
the report took into account the balance at geographic and thematic level, it
had some difficulty finding a common denomination for the 16 projects evaluated
in the report. This point raises the question of the special nature of science
and technology projects and how they differ from general technical assistance
projects. Some members of ACC find it regrettable that none of the projects
chosen for the evaluation were related to industries and to institutions for
technological support to the productive sector.

7.   Members of the Committee who have long experience in science and technology
institution-building at the regional level agree that, as an ideal case, typical
developing countries, and particularly the least developed ones, would normally
require institution-building projects with as many as possible of the 10
functions used by the Inspectors and listed in the report. However, they are of
the view that in order to deliver meaningful outputs along all those diverse and
complex functions, such an institution requires both extensive institutional
infrastructure and operational funds, which, in practice, are not available.
One solution to the problem may be the execution of such institution-building
projects as an integral part of a broader programme at the national and/or
regional level. Another solution could be the concentration of responsibilities
of an institution on a few selected functions in order to avoid ineffective
overstretching of efforts on too many fronts. Such regional institutions, from
the point of view of the experience of the agencies, which coincides with the
views of Member States, may be successful in servicing the countries' needs, on

condition that the projects are sharply focused on specific areas identified by the participating and beneficiary countries themselves, in accordance with their needs and priorities.

8.   ACC concurs with the Inspectors' view that the eight operational guidelines adopted in 1983 by the Intergovernmental Committee on Science and Technology for Development should be updated in order to provide a more comprehensive conceptual framework for the development and transfer of technology. Their usefulness in their current form is somewhat limited. Moreover, as also noted by the Inspectors in the executive summary of their report, even those guidelines are hardly applied at the field level by all organizations, owing also to the lack of awareness of their existence either at the level of the executing agencies or of field project management (see also para. 42 of the Inspectors' report). It is the opinion of ACC that an effort should be made to develop new or improved guidelines and to ensure their application.

9.   Some members of the Committee consider it irrational to explain the shortcomings of the implementation of operational guidelines for United Nations system support for science and technology by the lack of "common understanding" within the system of "what constitutes science and technology for development activities". As a justification of that conclusion, the Inspectors present at length different conceptual approaches of various organizations and agencies of the United Nations system to the subject. While agreeing with such an approach from a historical point of view, members of the Committee believe that it cannot form a basis for viable technology-related policy and that the main thing is not to look for a uniform comprehensive category or a definition of what constitutes science and technology for development, but rather to identify the real cause of the drawback to building the endogenous scientific and technological capacities of developing countries.

10. One organization expressed its concern that the Inspectors, in providing a long list of definitions of science and technology offered by various United Nations agencies and organizations, failed to present the conceptual definition of the Economic Commission for Africa (ECA) on the subject, in spite of the fact that the whole report is dealing with science and technology in the African region.

11. In the view of some agencies, the report provides very little insight on what policy reforms are needed to further science and technology progress in Africa and what the United Nations system could do to formulate and support such policy reforms. The report is also silent on the crucial issue of financing science and technology for development. While billions of dollars need to be invested in science and technology in Africa in order to break out of poverty, the analysis in the report of whether a few thousand dollars are spent or not on science and technology equipment on a project financed by a United Nations agency seems irrelevant.

12. Some members of ACC would have liked to have seen in the report the reference to reforms that are needed to unleash the entrepreneurial energies of the people in the African countries that would jumpstart the economy and enable rapid development. This is also of crucial importance in view of the very low level of private enterprise and of industrial development on the continent.

13. Some members of the Committee believe that the collective efforts of the United Nations system for institutional capacity-building in science and technology in Africa should be combined with country approaches. It should be mentioned that the generation, acquisition, transfer and diffusion of technology are often influenced by macroeconomic policy incentive schemes, price distortions, economic liberalization and structural adjustment policies. They stress that the findings and conclusions of the report could have been even more useful if it had included an in-depth analysis of the effects of the above factors on efforts to transfer science and technology to low-income and least developed countries.

14. Several members of the Committee expressed their concern that their preliminary comments on the report provided to the JIU, in particular their positive experience in the area under consideration, had not been included by the Inspectors in the final version of the document.

II.   COMMENTS ON RECOMMENDATIONS

Recommendation 1. Institution-building functions

                   Organizations of the United Nations system should refine and
                   adopt at the level of ACC, mutatis mutandis, the 10
                   institution-building functions used in the present report as
                   a normative framework for the design, execution and
                   evaluation of institution-building projects in the low-income
                   countries generally and in the least developed countries more
                   particularly. The framework should be incorporated into the
                   organizations' technical cooperation policies and procedures
                   manuals.

15. Members of ACC support in principle as useful the suggested normative framework for the design, execution and evaluation of institution-building projects. They believe, however, that the application of such a framework should not be limited to low-income and least developed countries, but should also be used in technical cooperation in general. Some of them reserve the possibility for individual agencies, in adapting the framework, to add additional aspects, like social aspects, international labour standards and so on.

16. In the view of one organization, for the purpose of the preparation for a normative framework for the design, execution and evaluation of institution-building projects, it would be useful to distinguish explicitly between modes of production, organization, technology and innovation in different countries and regions. From the methodological point of view, it seems inadequate to stress scientific and technological awareness of specific target groups, as indicated in paragraph 35 (a) related to the 10 institution-building functions. It would rather be advisable to suggest here practical orientations subject to analysis of major perspectives for radical improvement of productive development in low-income countries.

Recommendation 2.   Sustainability

All institution-building project proposals should be
justified by a thorough pre-feasibility analysis of the long-
term cost benefits and financial sustainability of the
supported institution, as the main condition for United
Nations system support, and self-financing project activities
should be encouraged and reflected in project designs
whenever appropriate. The relative cost-effectiveness of
different implementation strategies and tools should also be
examined.

17.   ACC is in full agreement with the idea in this recommendation that the
long-term financial sustainability aspects should be one of the main
prerequisites for United Nations system support for institution-building
projects.

Recommendation 3.   Programme approach

The programme approach to technical cooperation mandated by
the General Assembly in resolution 44/211 should be applied
more systematically and comprehensively to institution-
building projects.

18.   Members of ACC support this recommendation and state that in their
activities in the area under consideration they apply, to the extent possible,
the provisions of General Assembly resolutions 44/211 of 22 December 1989 and
47/199 of 22 December 1992.

Recommendation 4.   Technical backstopping

(a)   All funding organizations of the United Nations system
should consider the possibility of a set of penalties, to be
agreed upon at the level of ACC, so that the designation of
executing agency is made subject to past performance, which
also takes into account the performance of national
counterpart institutions;

(b)   Project agreements should explicitly specify and
quantify the direct technical inputs to be provided by the
regular personnel of the executing agency within or outside
the United Nations system (e.g. total man/months to be
devoted to the project, number of technical missions to be
conducted, volume of science and technology literature to be
produced or provided to the project, etc.).

19.   The proposal contained in part (a) of this recommendation drew sharp
criticism from a number of organizations and agencies of the United Nations
system. They believe that the idea concerning the introduction of "a set of
penalties" seems inappropriate and impractical to implement, as far as it raises
many questions, such as how and by whom the past performance will be evaluated,
whether a poor performance in one country will lead to sanctions in another and

so on. While questioning the need for the recommended measures, members of the Committee point to the established mechanisms, such as tripartite reviews, progress reports, review and evaluations, and so on, that are all geared to measure project progress and achievements and to ensure corrective actions, if needed.

20. Some members of the Committee consider both parts of this recommendation to be out of tune with recent developments as regards implementation modalities of the United Nations operational activities, that is, the national execution and programme approach. Under those modalities the main responsibility for programme design rests with the funding agency and the national executing agency, rather than with the United Nations agency. Furthermore, part (b) of the recommendation tends to focus on project inputs, whereas under the programme approach the main concern should be with outputs and impact.

21. With regard to the new element in part (b) suggesting the specification of the volume of science and technology literature to be produced or provided to the project, presumably by the executing agency, some members of the Committee consider it extremely difficult, not least because this proposal assumes that every project has an equal need for science and technology literature. Besides, the suggestion assigns more weight to quantity rather than quality of such literature.

<u>Recommendation 5</u>. <u>Chief Technical Advisers</u>

> <u>Justification for the Chief Technical Adviser's position should be very clearly established for projects supporting well-established institutions at the national or regional level, which should be used increasingly as implementing agencies</u>.

22. Some members of ACC understand this recommendation as an implicit reference to the expansion of the national execution modality and the use of local expertise for project management, both at the national and regional level. However, due consideration should be given to local circumstances, in particular in regional settings, where extensive pools of national expertise may exist but where employment of chief technical advisers in functions of project/programme management is still desirable in many cases. Other agencies mention that there is factual evidence of ineffectiveness of technical assistance, especially of technology transfer, centres in developing countries. The major trend today for improving the situation in those areas is to give the technical assistance funds directly to developing countries and to let them decide how to spend the money. They believe that in order to reshape aid so that it could meet particular objectives, it would be useful to have comprehensive, integrated country balance sheets of resource flow. Offering the resources as budgetary support would enable the receiving Governments to employ national experts where available. In this context the proposed idea regarding the Chief Technical Advisers seems premature.

Recommendation 6.   <u>Linkages to the production system</u>

<u>The end-users targeted by institution-building projects
should, to the extent feasible, be involved at the design and
planning stages of such projects, and linkages to the
production system and to the private sector more particularly
should be specified clearly in project agreements, depending
on the nature and objectives of the project and local
conditions</u>.

23.   The suggestion to ensure the linkage between institutions and the
productive sector is fully supported by the members of ACC. They mention that
in any institution-building project the end-users are taken into account at the
planning and organizational set-up of an institution. For science and
technology institutions the issue of the relationship with end-users is even
more pertinent, as far as an adequate balance is required between scientific
research, technology development and industrial application. Some agencies
noted that this recommendation put excessive emphasis upon short-term solutions,
which, though pragmatic, would not resolve the broad issue of raising overall
capacities for addressing long-term challenges relative to science and
technology. In their view, regional or national science and technology
institutions in Africa will require long-term support from external resources.
The success of long-term commitments has been well illustrated by those science
and technology institutions which have benefited from the global indicative
planning figure of the United Nations Development Programme (UNDP) for the past
15 to 20 years.

Recommendation 7.   <u>Regional setting</u>

<u>Within the framework of the United Nations New Agenda for the
Development of Africa in the 1990s, the Secretary-General of
the United Nations should</u>:

<u>(a)   Initiate discussions at the highest level of ACC
concerning the possibility of increased United Nations system
policy and programmatic collaboration in support of science
and technology capacity-building in Africa, especially in the
key areas identified in chapter III of the present report</u>;

<u>(b)   Consider the feasibility and timeliness of establishing
a few pilot science and technology strategic institutions of
national or subregional scope as recommended in paragraphs 72
and 73</u>;

(<u>c</u>) <u>Undertake consultations in the context of the United
Nations New Agenda for the Development of Africa in the 1990s
on the possibility of a summit meeting by the Organization of
African Unity on science and technology for development in
Africa, with substantive contributions from all organizations
of the United Nations system</u>.

24. ACC recognizes the great importance of the proposal contained in part (a)
of this recommendation, as far as the United Nations New Agenda for the
Development of Africa in the 1990s, in its paragraph 38, urges international
support for enhancing the scientific and technological capacities of African
countries. As far as part (b) of the recommendation is concerned, some members
of the Committee expressed their surprise that at a time when African
Governments have asked for rationalization and consolidation of the network of
the regional and subregional institutions, out of which eight are in the field
of science and technology, the report can contemplate the feasibility and
timeliness of establishing a few strategic science and technology institutions
that could be built from scratch. They believe that the real challenge of
institution-building in science and technology in Africa is not to create new
institutions in that area but to consolidate existing ones and to have them
properly staffed and financed. With regard to part (c) of the recommendation,
some agencies stress that the Organization of African Unity (OAU) holds its
summits annually and it might therefore be appropriate to devote one of those
summit meetings to the problems of science and technology for development in
Africa. Concerned organizations of the United Nations system could assist the
OAU secretariat in the preparation, organization and running of such a meeting.

<u>Notes</u>

    <u>1</u>/ See <u>Report of the United Nations Conference on Science and Technology
for Development, Vienna, 20-31 August 1979</u> (United Nations publication, Sales
No. E.79.I.21 and corrigenda), chap. VII.