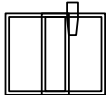



Consultancy Report
To the
Department of Technical Cooperation
International Atomic Energy Agency

Discussion Paper

TC PROGRAMME IMPLEMENTATION WITHIN EAST ASIA AND THE PACIFIC

) 2 8 5 7 +  5 \$) 7 

Disclaimer:

Any views expressed in this report are those of the author, and do not necessarily reflect those of the IAEA or of ANSTO.

Peter Airey
Environment Division
Australian Nuclear Science and Technology Organisation
PMB, MENAI NSW 2234 Australia
E-mail: pla@ansto.gov.au

Division Director: Professor Ann Henderson-Sellers
Contents

Executive Summary and Recommendations	4
Aim:	7
Structure of the report:	7
Project Formulation and Development	8
Project Appraisal	9
Implementation of TC Guidelines	10
<i>The average project size</i>	10
<i>Investment in Least Developed Countries</i>	11
Alignment of TC Programme Delivery with Government	12
Development Priorities	
<i>The East Asia and Pacific programme</i>	12
<i>Comparison of East Asia & Pacific with Asian Development</i>	13
<i>Bank programmes</i>	
<i>Intercomparison of the Agency's Regional TC Programmes</i>	13
Responsiveness of TC Projects to National and Regional Needs	13
<i>Enhancing the impact of TC projects on national activities</i>	13
The Nuclear Component of the TC Programme	14

Annexes

Annex 1:	Incorporation of an RCA Proposal into the TC Programme	22
Annex 2:	Assessment of TC Projects	24

Tables

Table 1:	UNDP Human Development Index	11
Table a (Annex 2)	Assessment of TC Projects (National)	28
Table b (Annex 2)	Assessment of TC Projects (National)	29

Figures

Figure 1: Variation of the average project size (expressed as US\$ for the

biennium 1999/2000) for the Regional programmes.

Figure 2: Variation of TC investment (US\$, 1999/2000) with countries ranked according to the UNDP Human Development Index.

Figure 3: Variation of the size of the ADB Public Sector programme with countries ranked according to the UNDP Human Development Index HDI.

Figure 4: TC Investment Contours for East Asia and Pacific Countries ranked according to the UNDP Human Development Index.

Figure 5: Comparative profiles of East Asia and Pacific and Asian Development Bank (Public Sector) Programmes.

Figure 6: Contours of investment profiles (expressed as a per cent) as a function of the field for the Regional programmes.

Executive Summary and Recommendations

The aim of this report is to prepare a background document which may contribute to a Strategy Paper on Technical Co-operation Programme in the East Asia and the Pacific region to be tabled and discussed at the 29th RCA General Conference Meeting.

The document will focus on issues associated with the evaluation of programme in relation to TC Strategy within East Asia and the Pacific; for the regional (both RCA or non RCA) and the national programmes. Of special concern will be

- whether or not TC's programme aligns with those of comparable development assistance agencies and with the development priorities of governments; and
- the extent to which TC projects impact on national development activities.

A summary of the document and its principal recommendations is set out below:

1. The Department of Technical Cooperation aims to move towards more effective program delivery through larger projects. Some consideration of this issue may be warranted since the average size of Regional (RCA and non RCA) projects in 1999/2000 is only about 60 per cent that in Regional Africa. One approach to achieving larger projects is to exploit existing synergies within the program. The RCA Meetings of National Representatives is a natural forum to discuss synergies between the national and the regional Asian programmes both RCA and non RCA and to make recommendations to the Agency. It is recognised that this would involve widening the remit of the RCA National Representatives' Meetings at the request of TC.

2. TC is offering Member States every encouragement to develop skills in the formulation, development and implementation of Projects. The development of these capabilities will facilitate an enhanced partnership between TC and Member States. One of the advantages of larger projects is the possibility of making project resources available for the 'on the job' development of Project Management skills. Such a skill base will contribute not only to building national infrastructure but also to relieving TC of some administrative load.

3. The policy towards biasing TC investment towards addressing the needs of the lesser developed countries is working to a considerable degree. However, the data in this report point to a case based on this policy for enhanced investment for example in Bangladesh.

4. A comparison was made of the investment profiles in the Asian region between TC and the Asian Development Bank (ADB) in an attempt to examine the extent to which TC investment aligns with Government commitments. Three conclusions can be drawn.

- ❑ Firstly, the level of ADB supported projects in the energy sector is higher and across a wider range of countries than that of TC (which is limited to nuclear power related activities).
- ❑ Secondly, ADB support for agriculture is considerably biased towards the lesser developed countries, while TC support is much more uniformly spread.
- ❑ Thirdly, in contrast to TC, the ADB support for the health and medical sector is relatively low across all countries.

5. It is pleasing to note that TC profiles in the East Asia and the Pacific region countries show a trend towards investment in nuclear related applications to agriculture, medicine, industry and the environment in the lesser developed countries.

6. The patterns of TC investment across the various regions are fairly consistent and differences are readily explicable. Such differences reflect, for instance, the priority in Regional Europe for investment in Nuclear Safety and in Africa for investment in agriculture.

7. An important TC policy objective is to encourage projects which specifically address actual problems of national and regional priority. Two elements are involved; 1) the design and appraisal of a project and 2) its implementation. Experience shows project implementation may contribute to achieving the policy objective by

- a) centering training and awareness programs around major demonstrations associated with priority problems; and
- b) identifying and encouraging small teams of experts which can respond at short notice to requests for support for specific project activities.

8. The crucial and unique role and contribution of nuclear technology is one of the criteria for TC Projects. As an example, a major challenge is to increase reactor utilisation within the constraints of a) other TC policy guidelines (eg alignment with Government development commitments), and b) increasing overseas commercial competition for the provision of reactor based products and services.

Two approaches are suggested: Firstly the needs of each country with a reactor

should be analysed with the aim of identifying a specific product (perhaps a radiopharmaceutical) or service (perhaps neutron activation analysis) for which TC support is warranted; and secondly, the possibility of using local reactor products and services should be explicitly stated in the project documentation for the information of TC.

9. A discussion role of Lead Countries and Regional Resource Units is not included in the report. These are mechanisms for releasing national resources into the RCA programme. Further consideration could be given to their role in furthering the broader aims TC policy eg aligning the TC programme with Government commitment, addressing priority needs and enhancing the size of TC projects.

Report

Aim:

The principal aim of this report is to prepare a background document which may contribute to a Strategy Paper on Technical Co-operation Programme in the East Asia and the Pacific region to be tabled and discussed at the 29th RCA General Conference Meeting on 20th September 2000.

The document will focus on issues associated with the evaluation of TC Strategy within the East Asia and the Pacific programme. Of special concern is

- whether or not TC's programme aligns with those of comparable development assistance agencies and with the development priorities of governments; and
- the extent to which TC projects "connect with", i.e. impact on national development activities.

In addressing these issues, special reference will be made to the four criteria for model projects, *namely*

- government commitment.
- addressing priority needs of countries;
- defined end users and beneficiaries;
- acceptable level of nuclear content;

The report will centre on the Technical Co-operation programme of the East Asia and Pacific Section (national and regional, RCA and non RCA). This programme will be benchmarked against the following:

- the national TC programme (East Asia and the Pacific)
- ARCAL and Regional Latin America (RLA);
- AFRA and Regional Africa (RAF);
- Regional West Asia (RAW)
- Regional Europe (RER);
- The Asian Development Bank (ADB) Public Sector Programme.

Structure of the Report:

Central to TC policy is the alignment of the TC Programme with government commitment. Demonstrating the extent to which this is being achieved will form the main thrust of the Report. Other aspects of policy or guidelines which are raised include:

- the need for priority investment in Least Developed Countries (LDCs); and
- the question of the optimum size of National and Regional projects, which is related to issues of the efficiency of program delivery and the need to complement and minimise overlap between national and regional projects.

These issues will be introduced with some comments on implementation of TC strategy.

Project Formulation and Development

TC is offering Member States every encouragement to develop skills in the formulation and development of Projects. The process for the approval of a Regional (RCA) Project is being actively discussed. A model which was agreed by the Meeting of Lead Countries, July 2000 is attached as **Annex 1**. Strictly speaking, this model refers only to RCA. As a number of features of the project formulation and approval processes apply to all projects, Annex 1 provides a good context for the discussion. A number of considerations are involved which include:

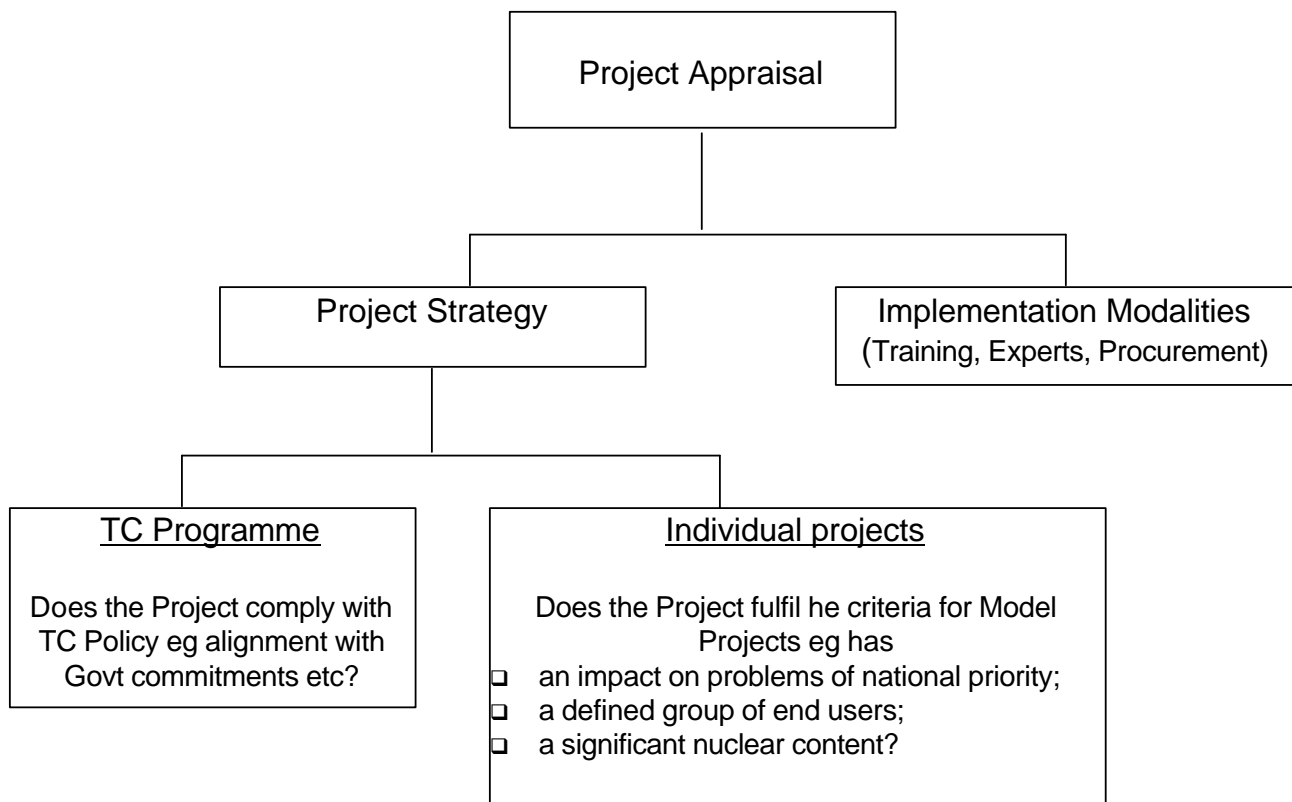
1. *Exposure of Member States to elements of TC Strategy.* This is clearly a generic requirement to which TC could respond with an awareness program according to the demand.
2. *Sharing with Member States, TC's thinking behind the design of the Project Request form, the Logical Framework Matrix and the Project Workplan:* This information is important for those involved in the formulation of a Project proposal. A good understanding of the need for information can materially help in the subsequent review and approval.
3. *Training of national TC liaison officers, RCA National Coordinators and project counterparts on planning and preparing good project requests:* The need for this training increases, the more the officer is involved in project review and appraisal at the national and regional level prior to formal submission to TC.
4. *Project monitoring and evaluation:* Skills in these areas are essential for the optimum implementation of the Project.

The development of these capabilities will facilitate an enhanced partnership between TC and Member States. One of the advantages of large projects is the possibility of making project resources available for the 'on the job' development of Project Management skills. Such a skill base will contribute not only to building national infrastructure but also to relieving TC of some of the administrative load.

Project Appraisal:

Fundamental to the TC policy implementation is the Project appraisal process undertaken by the IAEA. In appraising projects, a distinction needs to be made between TC modalities and strategy. The former relates to the mechanism of project implementation (individual and group training, equipment procurement etc) and is well covered in the project proposals. On the other hand, implementation strategy concerns wider issues related to the four criteria for model projects listed in the **Aims** section.

The following figure is an attempt to clarify the process.



Comments on project appraisal are presented in **Annex 2**. Tables have been developed to assist with the process. The principal columns (in bold) are the TC model project criteria. The rows 1 to 4.10 provide a basis for analysing the extent to which the project contributes to national priorities. [Two versions of the table are presented; the first focusses on national, and the second on regional considerations.](#)

The tables are designed for the appraisal of individual projects , national and regional. The concept is that ticks are entered in the appropriate boxes in the table. The pattern of ticks on the table provides one basis (among others) of assessing the extent to which the project fits in with TC guidelines.

The Implementation of TC Guidelines:

1) The average project size

Generally speaking TC is encouraging and looking for larger projects as they

- ❑ are more likely to have a sustainable impact on development problems of National and Regional significance; and
- ❑ contribute to more efficient program delivery. Indeed, sufficiently large projects can support elements of local project management, hence adding a new dimension to project outcomes (personnel trained in project management) as well as relieving TC of significant administrative burdens.

The average size of the regional projects in Asia (both RCA and non RCA combined) , Latin America, Africa, West Asia and Europe are shown in **Figure 1a**. The average size refers to the US\$ commitment to the projects for the 1999/2000 biennium¹. The largest projects are in Regional Africa. On average, they are about 1.6 times the size of those in Regional Asia.

Interestingly the average sizes of the Regional projects implemented under agreements (RCA, ARCAL and AFRA) are all less than the corresponding averages for other Regional projects for Asia, Latin America and Africa (**Figure 1b**). Within East Asia and the Pacific, the differences are probably not significant.

One of the approaches to the development of larger projects is to exploit existing synergies within the program. The RCA Meetings of National Representatives is a natural forum to discuss synergies within the national and

¹ Data form the 1999/2000 TC Project Compendium.

regional Asian programmes and make recommendations to TC. However, a broadening of the remit of the meeting would be necessary.

2) *Investment in Least Developed Countries*

Efforts are being made to direct TC investment into the Least Developed Countries. In this report, countries are ranked according to the latest UNDP Human Development Index (HDI)². Values are listed in **Table 1**. The level of investment for the East Asia and the Pacific countries ranked according to the HDI is set out in **Figure 2a**. The data in the figure is complicated by the impact of countries with large economies such as China and Indonesia.

TABLE 1: UNDP Human Development Index HDI
(Reference: Footnote 2)

Country	UNDP Human Development Index HDI
Japan	0.940
New Zealand	0.939
Australia	0.932
Singapore	0.896
Korea	0.894
Thailand	0.838
Malaysia	0.834
Sri Lanka	0.716
Indonesia	0.679
Philippines	0.677
Mongolia	0.669
China	0.650
Vietnam	0.560
Myanmar	0.481
Pakistan	0.453
India	0.451
Bangladesh	0.371

An attempt has been made to normalise the data using measures of the GDP published by the Asian Development Bank. These data are shown in **Figure 2b**.

² HDI values for 1998 are published on the UNDP Website at <http://www.undp.org/hdro/98hdi1.htm>

Using this measure, China is probably over corrected. In general, the data show a general increase in investment as the development level decreases. The exception is Bangladesh and possibly Pakistan.

By way of comparison, a similar plot has been made using data from the ADB. Both the raw data, and the normalised data are shown in **Figure 3**. Again, there appears to be a case based on these trends for enhanced investment in Bangladesh.

This analysis leads to two conclusions. Firstly, the policy towards biasing TC investment towards addressing the needs the lesser developed countries is working to a considerable degree. However, there is a case based on the data in both Figures 2a and 2b and the TC policy towards LDCs for increased investment in Bangladesh and [possibly](#) Myanmar.

Alignment of TC Program Delivery with Government Development Priorities:

1) East Asia and Pacific Region Program

A major strategic policy aim is to ensure that the TC Programme aligns with Government development priorities. This section of the report has two main aims:

- To develop a methodology for assessing whether this policy objective is being achieved; and
- To apply the methodology to the East Asia and Pacific and other Regional programmes.

Essentially the methodology involves a visualisation procedure. A TC program contours developed in which the US\$ value of projects are shown; on one hand against the development status of the country, and on the other the activity field (nuclear medicine, agriculture etc). Such a diagram is shown in **Figure 4**. A number of interesting features appear including the following:

- There is a fairly uniform investment in agriculture across the RCA countries.
- The lesser developed countries have tended to emphasise investment in nuclear applications (agriculture, medicine, industry and the environment);
- Investment in the energy sector is largely restricted to China, Pakistan and Indonesia.

These three points are raised as they will be contrasted with the Asian Development Bank Programme.

1) Comparison of the East Asia and Pacific and the Asian Development Bank programmes

The East Asia and the Pacific country and ADB programme contours are shown in **Figure 5**. The ADB programme refers to the Bank's public sector programme of technical assistance³. The classification of The East Asia and the Pacific country projects needed to be adjusted to fit in with the broader groupings adopted by the Bank. For the purpose of this report, it is assumed that the ADB programme reflects Government development priorities. The reasons relate to the fact that approvals require the involvement of a number of Departments of State and that the acceptance of a loan carries significant obligations.

The principal differences between the The East Asia and the Pacific country and the ADB programme profiles are as follows:

- The ADB investment in the energy sector is across more countries and is at a relatively higher level than the corresponding TC investment. This is principally due to the fact that the TC investment is restricted to the nuclear power sector.
- The ADB investment in agriculture (and fisheries) increases systematically with the decreasing development status (HDI) of the country. No such trend is observed with the TC investment in agriculture.
- TC invests significantly in the health sector in most The East Asia and the Pacific countries. ADB investment in public health and medical projects is uniformly low.

The relatively low investment in health related programmes appears to be a feature of the UNDP regional Asian programme. Explanations could be sought in terms of the WHO activities and the special responsibility the Agency has in supporting radiography and nuclear medicine.

Never the less, the TC patterns of investments in Agriculture and Medicine are significantly different from those of the ADB. Such differences might be

³ Data was posted on the Asian Development Bank's website under the appendix to the Country Assistance Plan (CAP) section of the country report. In the case of Bangladesh the address is <http://www.adb.org/Documents/CAPs/BAN/appendix.pdf>

considered further in terms of the policy of aligning TC investment with Government programmes.

3) Intercomparison of the Agency's Regional TC programmes.

Profiles of the TC investment patterns across all of the Regional programmes is shown in **Figure 6**. For each Region, the investment is expressed as a percent of the total for the Region. The patterns are fairly consistent and readily understandable. They reflect, for instance, the priority in Regional Europe for investment in Nuclear Safety and in Africa for investment in agriculture.

Responsiveness of TC Projects to National and Regional Needs:

Enhancing the impact of TC projects on or 'connect' with national activities

The aim of TC program delivery is to maximise the benefits to end users and thence to beneficiaries. There is some concern with some projects which may place too much emphasis on group training alone and rely on the course participant or National Coordinator to extend the technology to the end user. This approach will only work if those involved are enthusiastic and well placed to share the technology.

A more reliable method of ensuring the impact of TC projects on national and regional problems may involve

- a) centering training and awareness programs around major field demonstrations; and
- b) using relatively stable small teams of experts to address at short notice requests for national activities.

The former approach was used to good effect in the RCA Port of Songkhla sediment transport study; and the latter in the ARCAL/AFRA Dam Safety and Reliability Project.

The Nuclear Component of the TC Program:

The nuclear component of the TC program can be classified into:

- a) infrastructure including radiation protection, emergency preparedness, reactor operation and maintenance etc;
- b) research reactor utilisation;

c) applications of radioisotopes, radiation and 'nuclear related' technologies.

These comments will focus on research reactor utilisation. The IAEA through its charter has a special responsibility in this area. Currently, this area is not attracting many good project proposals.

Research reactors can contribute to national development through;

- the manufacture of isotopes for medicine, industry and research;
- the provision of neutron irradiation services (NDT, neutron beams etc)
- the provision of neutron activation analysis services; and
- integration of the reactor into the national technical education infrastructure.

The challenge is to increase reactor utilisation within the constraints of

- TC policy and (model project) guidelines, and
- increasing overseas commercial competition for the provision of reactor based products and services.

Two approaches are suggested:

- a) The specific needs of each country with a reactor should be analysed with the aim of identifying a specific product (perhaps a radiopharmaceutical) or a service for which TC support is warranted;
- b) In designing general TC project proposals the possibility of using local reactor products and services should be considered. Other factors being equal, preference could be given to proposals with a 'local re

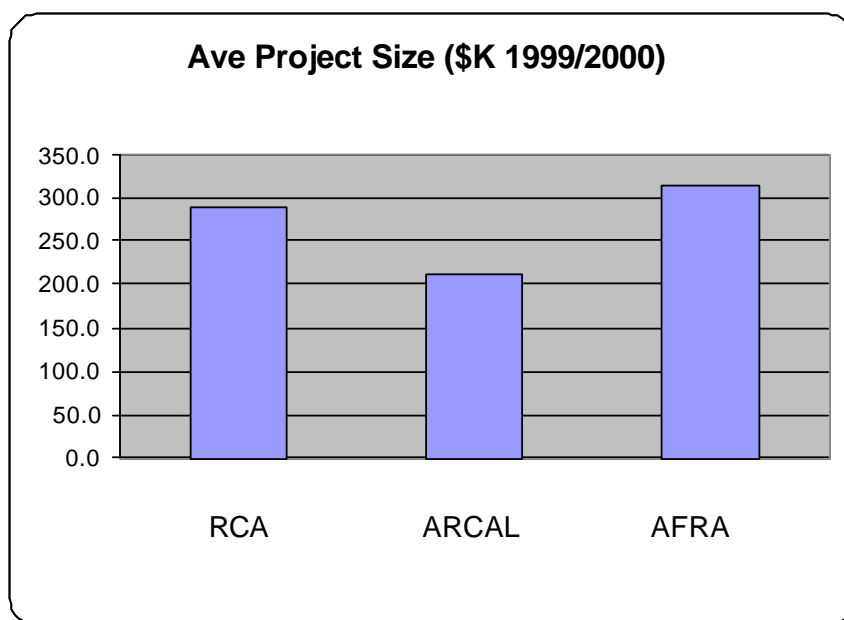
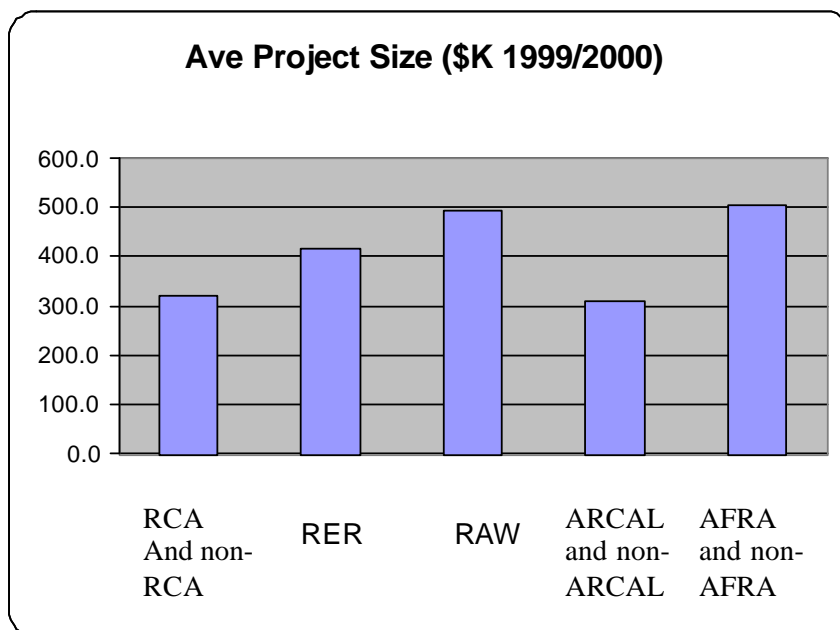


Figure 1: Variation of the average project size (expressed as US\$K for biennium 1999/2000) for the Regional programmes. *Upper:* the overall Regional programmes; *Lower* the 'Agreement' Programmes RCA, ARCAL and AFRA.

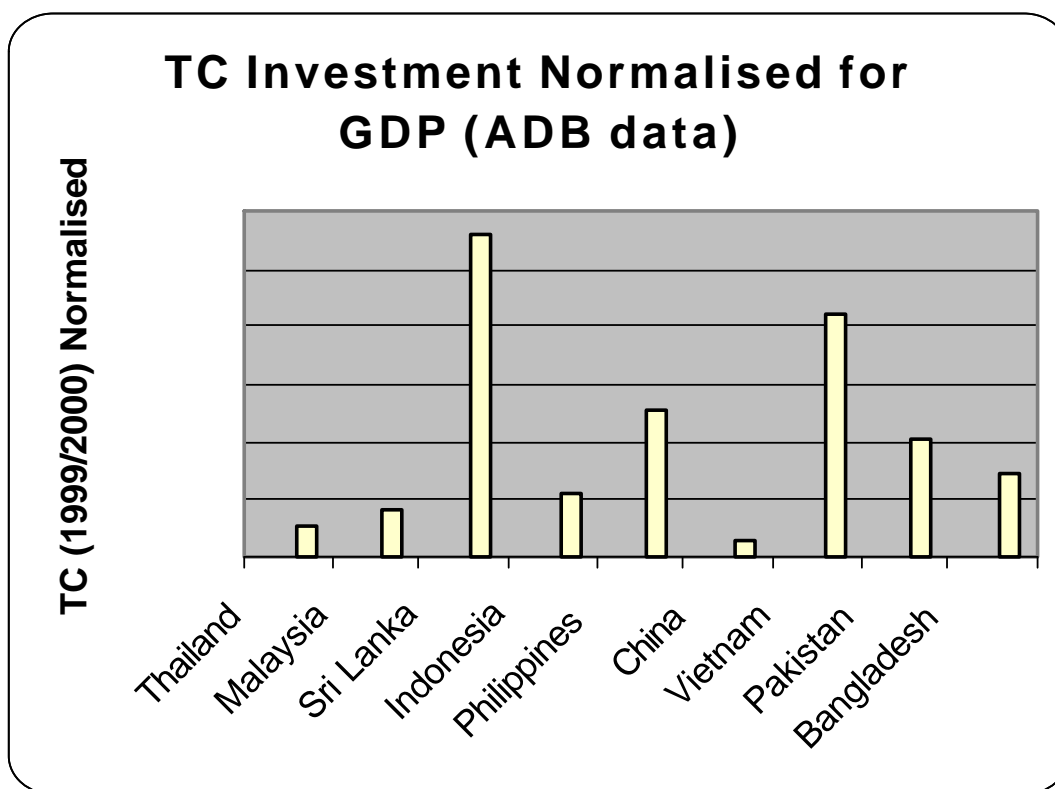
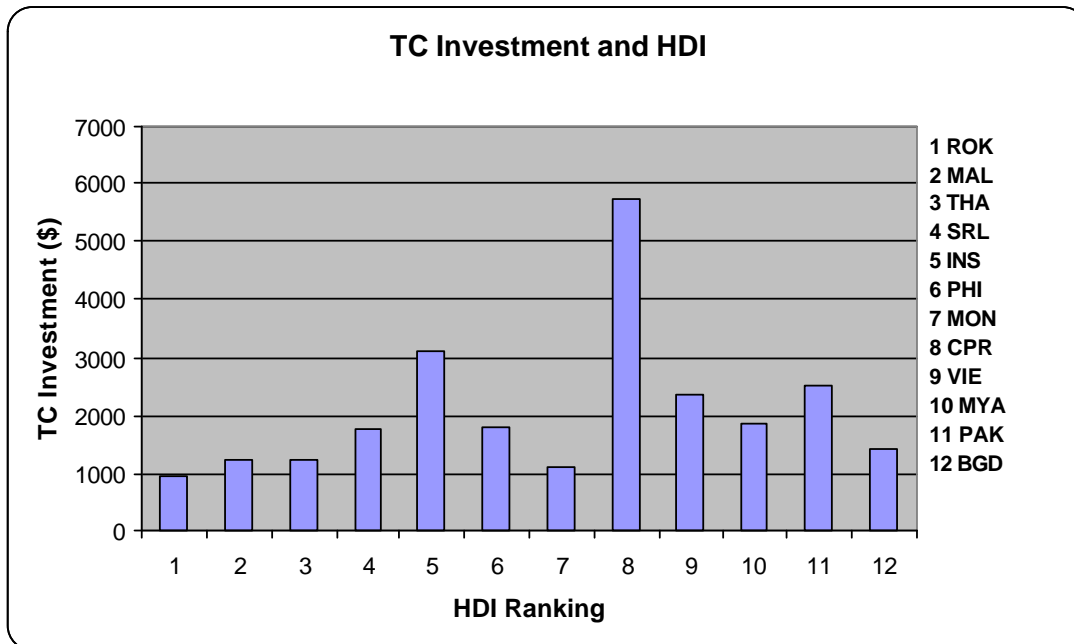


Figure 2: The variation of the level of TC investment (1999/2000) with the UNDP Human Development Index (HDI). *Upper* uncorrected data; *Lower* Data normalised for the GDP (Asian Development Bank data).

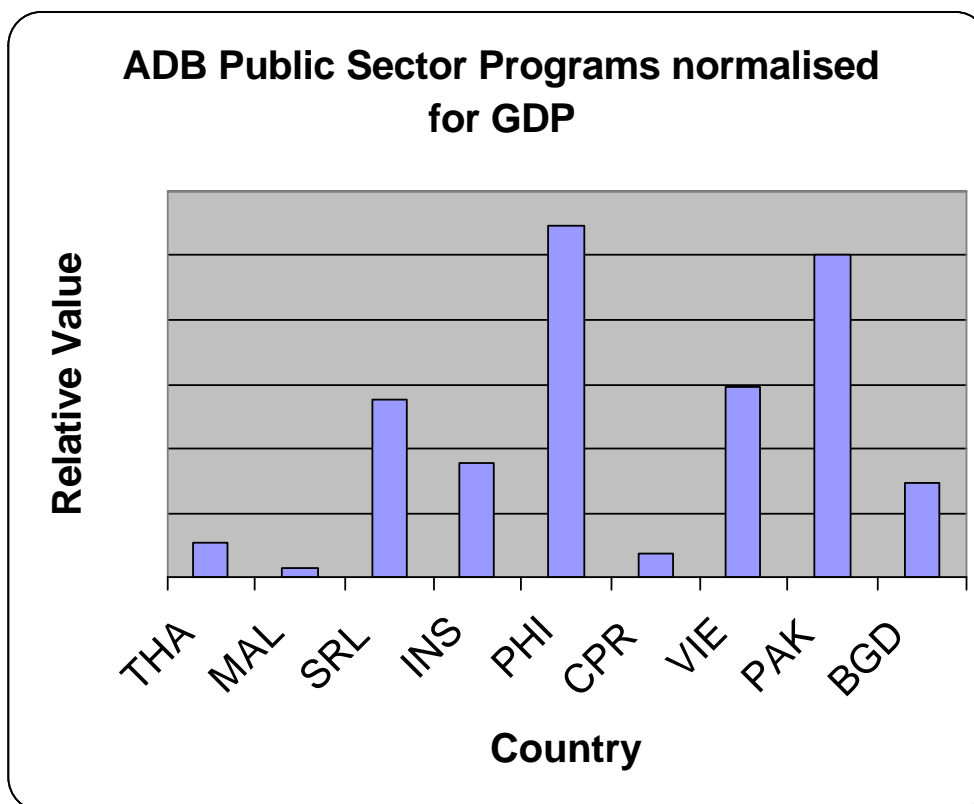
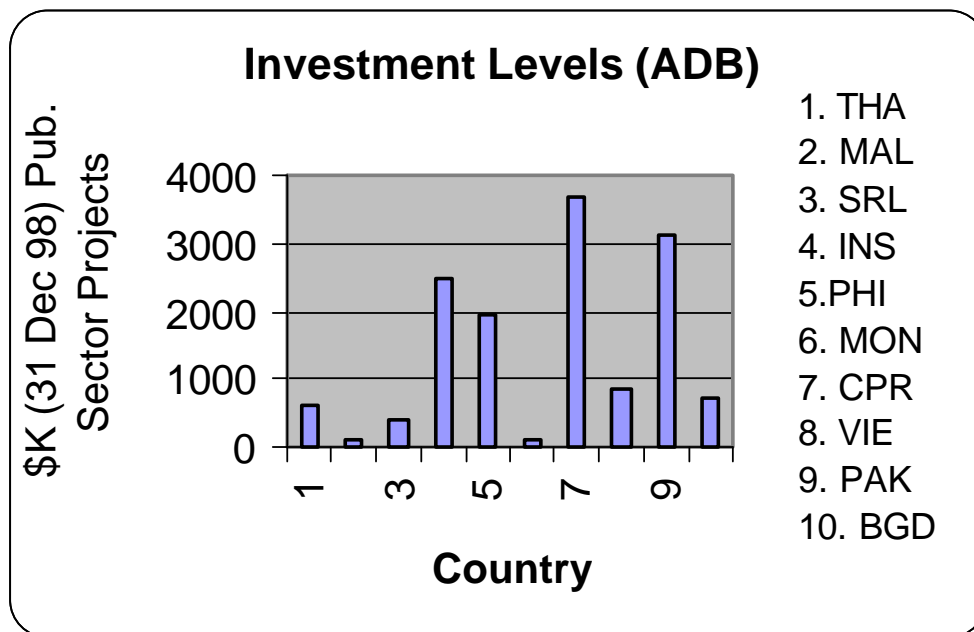


Figure 3: Variation of the size of the ADB Public Sector programme with countries ranked according to the UNDP Human Development Index HDI. *Upper:* Uncorrected data; *Lower* Programme size normalised according to the GDP.

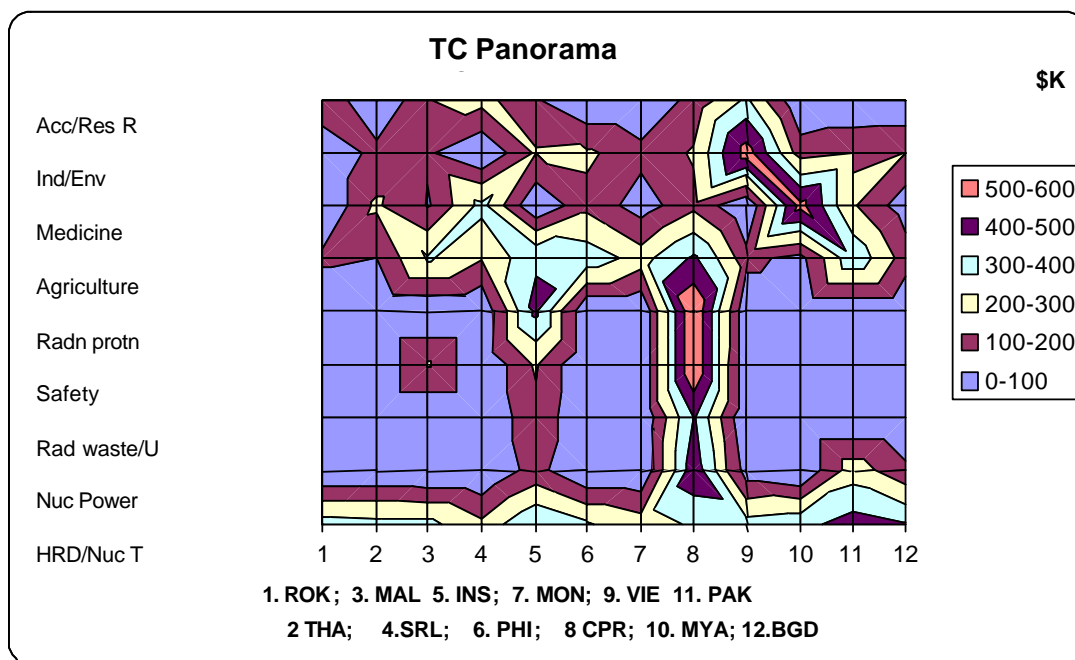


Figure 4 TC Investment Contours for East Asia and the Pacific Countries ordered according to the UNDP Human Resources Index

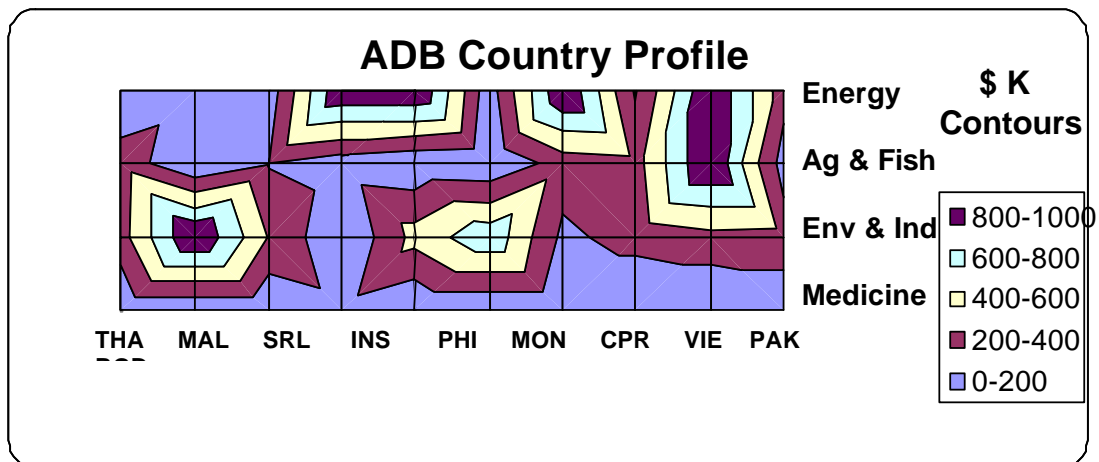
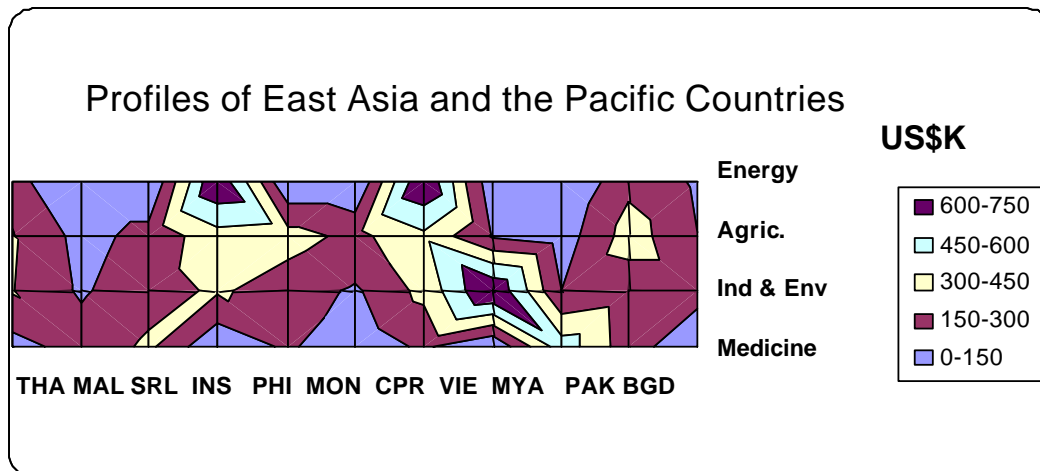


Figure 5: Comparative Profiles of the East Asia and the Pacific Countries and the Asian Development (Public Sector) Programmes

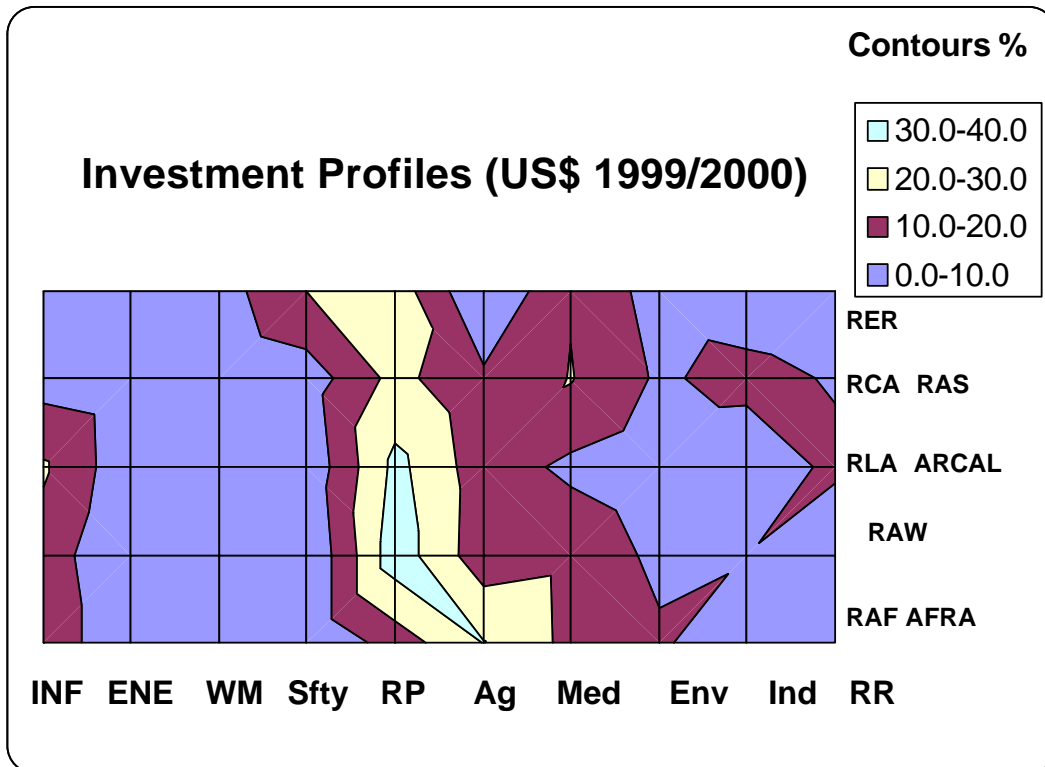


Figure 6: Contours of investment profiles (expressed as a per cent) as a function of the field for the Regional programmes.

Key: INF Infrastructure development; ENE Energy; WM Waste Management; Sfty Safety Related; RP Radiation Protection; Ag Agriculture; Med Medicine; Env Environment; Ind Industry; RR Research Reactor and Accelerator.

The pattern reflects the priority in Regional Europe for investment in Nuclear Safety and in Africa for investment in agriculture.

ANNEX 1

Incorporation of an RCA Proposal into the TC Programme

Milestone	Time (week)	Comment
1. New proposal	0	A new proposal ⁽¹⁾ may be presented by an RCA Member State through the RCA National Representative
1.1 Initial review	2	The project document is submitted to the National Coordinators ⁽²⁾ for the particular technology sector involved.
1.2 Circulation of the revised proposal	10	The proposal will be revised by the proponent on the basis of comments received. The document will be circulated by the RCA Coordinator to the RCA National Representatives at least 8 weeks before their next Meeting ⁽³⁾ .
2. Meeting of RCA National Representatives	18	This procedure complies with Section 4 of the RCA Guidelines. The Project Committee will be established if 3 or more RCA member States have expressed interest.
2.1 Appointment of a Project Committee and an interim Project Committee chair. The Committee should include an IAEA Representative.		
2.2 Appointment of a Lead Country		
3. Meeting of the Project Committee ⁽⁴⁾ for the preparation of the detailed project proposal	32	The Lead Country will be responsible to the Project Committee for the preparation of a full project proposal in accordance with TC requirements.
3.1 Circulation of a detailed Project Proposal to RCA representatives	34	
4. Submission of the proposal to TC by the RCA Coordinator for full appraisal and approval	36	The RCA project will undergo appraisal in accordance with normal TC Procedures.

NOTES

(1) The project proposal should be in the form of Project Document which should to the extent possible contain the following elements:

- Description of the regional dimension of the project with particular reference to how the project will respond to the particular needs of the country;

- Justification from the scientific and technical points of view with special reference to the use of nuclear technology;
- Description of the attainable and measurable objectives and the expected impact on the end users and project beneficiaries;
- Description of the inputs and outputs of the various components of the project;
- Estimate of the project duration and budget.

(2) The National Coordinators will ensure that the proposal is in line with RCA sector programme objectives.

(3) A period of 8 weeks is required to allow the RCA representatives time to decide whether their country wishes to be involved.

(4) The Project Committee will either act as a Project Formulation Meeting (PFM) or meet concurrently with the PFM.

ANNEX 2

ASSESSMENT OF TC PROJECTS

Basis of the assessment:

A basis for assessment is set out in tabular form below. The principal columns are the four criteria for model projects; namely

- response to the real needs of the country;
- economic and social impact through the end user;
- the role of nuclear techniques; and
- government commitment.

These criteria will be discussed in turn:

Response to the real needs of the country

This was assumed to be the fundamental criterion and was further analysed into five sections, two of which were sub-divided. The five sections are:

- social infrastructure;(incl. human resources development)
- regulatory infrastructure;
- trade and commerce;
- economic infrastructure.

These sections and sub-divisions form the rows of the tables at the end of this Annex. The second table is derived from the first, but focusses on Regional issues. TC policy mandates priority for projects are integrated into programs which attract a strong government commitment. The five sections therefore reflect those government interests on which TC projects are likely to impact.

Government interests are deemed to include encouragement of productive enterprise in both the private and the public sector. Support for projects in which an end user is a 'for profit' industry is not excluded. However, judgment is needed in this area and special weight should be given to the needs of LDCs.

Economic and social impact of the end user:

There is clearly a relationship between the size of the end-user group and the magnitude of the impact which would justify TC support. For instance, many projects in the health area would lead to a major impact on patients (which generally constitute a small group within the community). On the other hand, many agriculture projects may have a relatively smaller effect on the security of food supply, but potentially affect a much larger group. The impact on the end user has therefore been classified as follows:

- major impact on a large group;
- major impact on a small group; and
- minor impact on a large group.

Because of their size, most TC projects would fall into the second or third category. The exception would be TC projects which have made a significant impact on large Government programs, through, say the application of appropriate nuclear techniques which were otherwise unavailable.

Relevance of nuclear technology:

The nuclear technology is classified as available (A) or potential (P). Available technology is widely used for the particular application (perhaps in industrialised countries). Technology with potential (P) has been demonstrated, but is not currently being used routinely in the applications nominated in the TC project.

Commitment to the project:

Commitment to the project has been classified as follows:

- Whole of government (ie evidence of material support from more than one government department for large development projects to which the TC project is directly linked or contributing).
- Government - sectorial (ie financial support from an individual government department or , say, a Nuclear Research Institute);
- Donor support (declared willingness to make a cash contribution to the project); and
- Private sector (financial commitment from elements of the private sector which play a significant role in national development).

Generally speaking, it is assumed that the most direct evidence of commitment is a willingness to make a financial investment in a project to which the TC project is strongly linked and contributes to. However, a broader interpretation of commitments from LDCs is appropriate.

Concluding comment:

The division of the category 'real needs of the country' into various sub-sections (rows in the table) reflects a personal view and is inevitably somewhat arbitrary.

TABLE: PROJECT ASSESSMENT (NATIONAL)

Columns in bold reflect the four criteria for model projects;
The numbered rows reflect an analysis of the “Response to Needs” criterion.

Respond to the needs of the country or region:		End user impact			Nuc. Tech- nology		Commitment from Government and related interests				Comments
		(1)	(2)	(3)	A	P	(4)	(5)	(6)	(7)	See below
1.1	Social infra-structure	HRD									
1.2		Medicine and Public Health									
2	Regulatory infrastr										
3	Trade and commerce										
4.1	Economic infrastr	Drinking water									
4.2		Environment									
4.3		Marine									
4.4		Soil productivity									
4.5		Animal prod.									
4.6		Agriculture									
4.7		Minerals									
4.8		Industry									
4.9		Energy									
4.10		Waste disposal									

LEGEND: (1).High impact on large numbers: (2) High impact on small numbers (3) Low impact on large numbers A Available technology P Potential Technology (4) Whole of Govt Commitment (5) Government sector commitment (6) Donor Commitment (7) Private sector commitment

TABLE: PROJECT ASSESSMENT (REGIONAL)

Columns in bold reflect the four criteria for model projects;
The numbered rows reflect an analysis of the “Response to Needs” criterion.

Respond to the needs of the country or region:			End user impact			Nuc. Tech-nology		Regional Commitment				Comments
			(1)	(2)	(3)	A	P	(4)	(5)	(6)	(7)	
1.1	Social infra-structure	HRD										See below
1.2		Medicine and Public Health										For example, specialised training not adequately provided nationally.
2	Regulat-ory infrastr											Public Health issues involving the Region.
3	Trade and commerce											Harmonisation of regulations.
												Enhancement of Regional trade.

	Respond to the needs of the country or region:		End user impact			Nuc. Technology		Regional Commitment				Comments
			(1)	(2)	(3)	A	P	(4)	(5)	(6)	(7)	
4.1	Economic infrastr	Drinking water										See below In appraising Regional projects, special reference is made to issues with trans-boundary implications. These could include eg <ul style="list-style-type: none"> • Environmental esp air quality and marine; • Resources development; • Introduction of new capabilities across the Region.
4.2		Environment										
4.3		Marine										
4.4		Soil productivity										
4.5		Animal prod.										
4.6		Agriculture										
4.7		Minerals										
4.8		Industry										
4.9		Energy										
4.10		Waste disposal										

LEGEND: (1).High impact on large numbers: (2) High impact on small numbers (3) Low impact on large numbers A Available technology P Potential Technology (4) Consistent with National Commitments (5) Consistent with UNDP, ADB investments (6) Donor Commitment (7) Private sector commitment