1. The Porto More area

1.1 Introduction

The region covered by the group work can be divided into two separate areas. The coastal region (Porto More) is described below, the inland area shows a marked similarity to many developing countries in the tropics and will not be described in detail.

Porto More is a medium size town, located at the coast, near to a lagoon. A small river discharges some fresh water in the lagoon. There is a very weak tide in the sea (less than 0.5 m). Because of the river discharge there is a salinity gradient in the lagoon, which has resulted in a very valuable ecosystem of brackish, non-tidal wetlands. Unfortunately these wetlands are quite vulnerable to pollution.

Porto More is an urban complex with port and industrial facilities, with a well-developed service sector. Traditional fishing mainly takes place in the coastal waters. In the hinterland, various types of primary production take place, including agriculture and some mining. Wage levels, existing pollution control and production technologies are comparable with those of many countries in tropical areas.

Porto More’s main economic activities are the harbour and some chemical industry. Besides that, fishing is very important. There is a wealth of fish along the shallow coast near Porto More. The high amount of biomass in fish is directly related to the existence of the wetlands in the lagoon, which acts as an important place in the life-cycle of Pelagian organisms. In the fishery sector some 20000 people find a job.

The chemical industry is quite old, and is mainly producing fertilizer for the national market. The industry is polluting the lagoon, mainly with phosphates, causing algae bloom especially during the summer season. In the chemical industry some 10000 people find a job.

Traditionally the trans shipment of goods to the hinterland is an important activity in Porto More. At this moment some 5000 people work in the harbour and in harbour related activities. At this moment trans shipment is mainly traditional, i.e. containers are unloaded by standard cranes and transported to the hinterland by truck. A large part of the containers are unpacked in the facilities and the goods are transported by small trucks. The draft of the ships is limited. The accessibility is decreasing because of siltation in the harbour basins. This siltation has to be dredged away. Until now this has been done with an old bucket-dredge, the spill is dumped in the wetlands area. Of course there are more industries in the area. In the other industries in total approx. 40000 people are employed.
1.2 Transshipment and Port Activities

Because traditional transshipment is declining, and cargo is lost to the competing port of Whiteharbour, plans have been developed to construct a new container terminal. The budget for this terminal is:
- Construction cost 15 Muc/berth
- Improvement of the marshalling yard 100 Ulc/TEU capacity
- New railroad connection 6 Muc

The throughput (incoming + outgoing) of one berth is 40,000 TEU/year maximum (the theoretical capacity is much larger, but it is expected that such a high efficiency cannot be reached). The expected growth rate of throughput for the whole country is between 10,000 and 15,000 TEU/year. However, this growth depends strongly on the general development of the economy in the country. This growth has to be covered by three national ports, and Porto More wants to have a share of at least 60%.

The dredging costs depend on the quality of dredging. It has been decided to dredge the mud in an environmentally friendly way, but it has not yet been decided if treatment of the mud will be done. Yearly cost of dredging one berth are in the order of 0.1 Muc. Dredging in such a way that also the polluted bottom is removed and cleaned will cost in the order of 15 Muc initially and 0.2 Muc/year.

1.3 Other economic activities

In other sectors of industry some 40000 people are working. This is mainly small scale industry. Apart from the workers in industry there are also jobs in supporting sectors, like local government, shops, garages, etc. In this “supporting sector” works 45% of the amount of people working in the “direct sector”.

The chemical industry intends to expand the activities. There is more demand for fertilizer in the country. It is not exactly known how much will be the increase in demand for fertilizer. The fertilizer industry is polluting the bay mainly with phosphates. At this moment 70% of the load of phosphates comes from the industry. The remaining 30% comes from the fishery-sector and from the other industries. A treatment plant is foreseen.

At this moment the fishery sector is very important from an employment point of view. The fishery sector intends to invest in the sector, to build larger vessels, but also to invest heavily in the fish processing industry. This creates quite a lot of jobs and income. Of course the economic results of the sector largely depend on the economic development. Investments in the other sectors are also foreseen.

Plans exist to create a marine sanctuary in the wetland area. This will probably attract some tourists in the region, but the main aim of the creation of this sanctuary is to improve the ecological infrastructure and the quality of life in the region. The creation of this sanctuary is strongly advocated by the local environmental NGO, the “Lagoon League”.

EAPD’98 Varna (21-24 September, 1998)
1.4 Effects of investments

The effects of investments in each sector are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Chemical Industry</th>
<th>Cargo Handling</th>
<th>Fishery</th>
<th>Other Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resulting extra income from the sector (MUL/year)</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Resulting extra jobs/year in the sector</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Resulting yearly extra air pollution</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Resulting yearly extra water pollution</td>
<td>50</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Resulting yearly extra pollution of the mud</td>
<td>70</td>
<td>15</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

There is at this moment a population growth of 4% per year. This is the natural growth by birth plus the immigration from elsewhere. When the environmental conditions are improving the population growth will increase. In case of a decline in environmental quality, the growth will decrease. The existence of a healthy wetland is important for a healthy population.

Water can be made cleaner by investments in waste water treatment plants. The polluted bottom of the harbour can be cleaned up by environmental dredging. However, environmental dredging is not very effective when the water stays polluted. The air quality can be improved by investing in air filtering technology.

The profit and the number of jobs in the chemical industry depend on the economic growth and on the demand of fertiliser. The growth in cargo handling depends on the national economic growth.

The growth in the fishery sector strongly depends on the quality of water and mud. It depends of course very much on the existence of a large and healthy wetland area.

The growth in the other economic activities depends on the quality of air, water and also on the quality of the underwater bottom.

It will not be possible to implement all above mentioned options in such a way that the potentials of each option will be utilized in an optimal way, as (amongst others):
- the total available budget will never be sufficient to implement all options to their maximum potential;
- the effects of increased activities in one sector may negatively influence the developments in other sectors (like: increased industrial activity --> increased pollution --> negative effects for fishery, national reserve, etc.);
- limited available labour.

Trying to implement all these options may lead to conflicts in planning and resources management. For example, is there enough coastal land for the development of residential housing, port facilities and other industries? How might the construction of a new port and the increased shipping affect existing fisheries and the conditions of the national reserve? If increasing industrial activities will cause serious water pollution, what is its effect on agriculture, fisheries, environment and...
recreational activities? Which measures should be taken to prevent or reduce these conflicts, and how can an optimal balance be achieved?
2 Exercise Indicator Analysis

2.1 Objective of the exercise
The regional authorities have the task to improve the economic structure of the region, taking into account the contribution to the national economy and the interests of the local population.

It has been decided to employ consulting groups to investigate several development options. At least the four options that have been identified and proposed in the previous chapter have to be considered. Among others, the following aspects may be taken into account:

- Fish and fisheries
- Wildlife
- Natural vegetation
- Agriculture
- Human population
- Energy
- Tourism
- Industry
- Trade and cargo handling
- Cultural values
- Services

For each element or sector one or more descriptors or indicators will be selected to measure the positive or negative changes that may occur. In addition the relative importance of the various components has to be indicated.

A second task for the consulting group will be the formulation of the terms of reference (TOR) for the EIA of each development option.

Some of the data required can be found in chapter 1. Additional information has to be obtained from other sources. Because "Porto More" is non-existing, you may "invent" information if needed. It is explicitly allowed and even intended that you use information from your own region or experience, in the execution of the assignments.

2.2 Assignments
This assignment will be carried out in small groups. Each group will carry out the tasks described under objectives. Joint work with other groups is possible, especially concerning the sharing of data and sources of information. The interaction between the groups is however a key element in the assessment of the merits and negative aspects of different elements of the development of the region.

To complement the base-line data and as preparation for the selection of a limited number of development projects, an inventory of alternative options for the proposed projects has to be carried out.

In view of the need for economic development of the region and of the country as a whole, the potential local, regional and national economic benefits of development in these fields have to be
evaluated. Obviously both the short-term and the long term aspects have to be taken into account. This also applies to the social and the ecological implications.

The survey of the feasibility and the acceptability of different projects should provide a sound basis for the selected options. Obviously the depth of study of the different issues can to a certain extent be influenced by a preliminary selection (scoping) based on the preference and the expertise of the consultant. Sufficient attention has to be paid however to all fields to show the justification of the focus on particular elements.

The relationships between the potential developments (‘trade-off’) has to be taken into account as there may be both negative and positive interactions, influencing the selection of individual options. In this framework it is also important to consider the time-scale involved in the preparation and implementation of a project (e.g. planning and construction). The latter will however mostly play a role in the project formulation in assignment 3, as indicated below.

2.3 Overview of the steps in the first assignment

1. Problem analysis and definition
   In this first step you have to make an overview of the base-line conditions. So describe in a systematic way what is known of the region.

2. Inventory of project options
   You make an overview of all potential developments of the region in very broad terms. So, make an overview of what is possible.

3. Make an overview of potential indicators
   Make a list of all indicators you estimate relevant for the judgement of the quality of an alternative. For example, how many jobs are created, how many species will be killed, how much money will be earned, how much pollution you expect. Also indicate how you intend to measure the indicator (for example, you can measure the increase in energy demand in kWh). Try to quantify the indicators for your case.

3. Description of proposed projects
   You make an overview of those alternative developments (project) you regard as relevant for the region. Within the alternative, you pay attention to the economic, the social and the ecological elements. Indicate the relation between the alternatives and the indicators. and quantify the expected values of the indicators. (preferably as a numerical value; if that is not possible, you may give values as ++, +, +/-, -, --.

2.4 Environmental Impact Assessment
   The next step in the process is to prepare an Environmental Impact Assessment. Before that can be done, a Terms of Reference for the EIA has to be made.
   An optional assignment is to prepare the Terms of Reference for the EIA that will be undertaken by your group. The Terms of Reference should recognise the legal requirement of the state within you are operating and should follow the intent and objectives of good environmental impact assessment. The terms of reference should provide an indication of the alternatives that may be available. They should also indicate how the environment identified in the EIA process will be integrated with development design. It is important to include flexibility to allow for the likelihood that some of the information gained may indicate the need for further or more detailed studies. The role of public
involvement should also be considered and the outline of the programme should you decide to have one) should be included.

Consider that the expected headings in an Environmental Statement must include:
- Summary
- Purpose of development
- Scoping activities
- Environmental baseline
- Project and alternative description
- Prediction of effects
- Evaluation of impacts
- Means to minimize or control impacts
- Public involvement
- Recommended option with reasons
- implementation plan
- monitoring

Provide your Terms to meet this Table of Contents explaining what is to be covered in each area and what studies (if any) will be needed to acquire the necessary information.

Recognise that the actual decision making in the EIA process will follow an iterative route with progressive learning and understanding.
Options will develop and change during the process. Decisions on how and why these changes came into being should be recorded for understanding of the reader and decision maker. If any particular methods are desired to assist in organising or comparing data to assist in decision making these should be requested or explained.

An example of a Table of Contents is:
1. Tasks
   - Objectives of the Project
   - Output
   - Results
2. Approach
   - Time schedule
   - Activities
3. Scope of the work
4. Reporting
5. Staffing and Personnel specifications
   - Inputs
6. Monitoring
7. Budget estimates

Note that not all topics listed above necessarily have to form part of the TOR, moreover there is an overlap between some of the headings. Depending on the type of project the most appropriate description should be selected. As appropriate add additional sections or reorder the Table of Contents to fit the needs of your development. Approximately two pages should be sufficient to cover this assignment.
3 Weight factors

You have made in the previous part of the exercise an overview of alternatives, and overview of the indicators and made an estimate of the change of the value of an indicator for the various alternatives. However, not all indicators have the same value. For example income per head of population is much more important than the ecological health of the wetlands (or is it just the other way around??).

In any case, one should give some weight to the various indicator. This has to be done in a systematic way.

A general starting point is that you may categorise all indicators into two groups, the Ecological/Cultural group and the Social/Economical group. You may define the two groups different if you like. Subsequently you may subdivide each group is subgroups. For example Ecology/Culture you may subdivide in Natural Life, Pollution, Cultural Heritage. And so on. Finally you end up with all individual indicators, as defined in the first exercise.

On each level you may define your weight factors. For example Social/Economy 60%, Ecology/Culture 40%; Natural Life 20%, Pollution 30%, Cultural Heritage 50%, etc.

With a computational trick you can calculate the overall weight factor for each indicator. When you know the value of each indicator you are able to calculate the weighted score for each alternative. In this way you are able to calculate the “best” alternative.

Of course, “best” is according to your weight factors. Someone else, with an other view on the importance of the different groups, will give other weight factors. So in fact this method does not provide the “best alternative” but the “best alternative according to...”.

A strong point of the method is that you can ask several stakeholders on their opinion (= in fact asking their weight factors) and by making the calculations, you can easily find out which indicators are very sensitive. Also you can find out how much the ranking varies for all stakeholders. If alternative X is the best according to all sets of weight factors, a more detailed discussion on the weight factors is not needed any more.

Exercise
You are asked to set up a scheme with all indicators, placed in groups. Do this in such a way that you end up with two final groups. Define for all indicators the lowest and the highest possible value, define the weight factors for all groups and indicators and put them into the Jesew-program (see annex). Define the expected value for the indicator values for all alternatives considered by you. Enter them also in the program and make a plot of the results. Then vary your weight factors and investigate how much influence this has on the final result (i.e. how the plot looks like).

4 The determination of numerical values

4.1 General
In the indicator analysis one has to enter the values of an indicator. In the previous exercise a value was estimated. One may determine this value by defining it as a target value for a given alternative strategy. But in reality, such targets will usually not automatically met. Values like the income, the amount of heavy metals in water, etc. cannot be steered directly, but are usually the consequence of other actions. For example, the income will rise as a consequence of investments in the economy. The income per head of population however is not only determined by the investments in the economy, but also by the population growth. But of course there are more complicated relations. Because the industry is polluting the environment, the quality of the water becomes less. And when the water quality is low, the production of agriculture is low, and tourist will not come to the area. So, this will cost income and jobs. The conclusion is that investments in one sector of the economy may have negative effects in other sectors. A solution to this problem is cleaning the environment. However, this again costs money, which cannot be used elsewhere in the economy.

All together the socio-economic system is rather complicated to predict, and especially if one also tries to include the environmental parameters.

For decision-making a score-card is an essential tool. In the score-card an overview is given of a number of attractive alternative strategies. For each strategy the input is given, as well as the indicator values. One can put these alternative strategies in a program like Jesew, to compare the alternatives.

In reality in the policy-analysis process, the alternatives, the scenarios and the indicators are determined. In order to get some feeling regarding the importance of the indicators, some trials with Jesew can be made. After the determination of alternatives, scenarios and indicators an "empty" score-card is made. For the filling in of the score-card in reality a number of experts have to be involved. Socio-economic experts will determine the effects of the alternatives on the employment, biologists will investigate the effect on the ecosystem, etc. Usually this is a rather lengthy procedure. Each researcher will use its own, specialised models, in order to come up with the answers, and produce its own report.

The policy analyst then has to evaluate all reports, deduce the required information, and fill-in the score-card.

In order to simulate this process, in the computer program CRESS a "Demo Coastal Zone Management" has been included. In this routine, a model is included of the full socio-economic and environmental system of the Porto More area. Of course this is a very simplified model. The advantage is however, that you get a very fast response for the various investment-options in the area. Of course only a limited number of sectors is included. The sectors included are mentioned in table 3 of chapter 1. In the model there is some interaction between pollution and the production.

4.2 Exercise score-card

In the Porto More area investments in the coastal zone will be done. These investments are both by private companies and by the government (via money they have on loan from the World Bank). The effect of the total invested money has to be investigated. You are divided in groups of 2-3 persons; each group will have a different assignment. The total amount of money to be invested is given in your group assignment. Your group has a specific client, with specific objectives. Your client is one of the interest groups in the Porto More. They have explained their objectives in a statement, which is attached to your group assignment. You should develop a strategy to invest the money over the given sectors Chemistry, Cargo Handling; Other Industries and Fisheries, following the objectives given in your assignment. You have also to reserve some money for cleaning water, cleaning air and environmental dredging activities.
You have to investigate the effect on both short and long term.

You are requested to make a very short report of your findings. Investigate also the sensitivity of your input, and have a look to the scenario-parameters\(^1\). Perhaps you should vary them.

The report should consist of very few pages and has to be written on standard A4 sheets, in order to allow easy copying. Your report will be used in the session of the Coastal Commission, so it should contain the relevant information for your client.

## 5 The simulation game

### 5.1 Aim

The aim of the game is to simulate the decision making process. In reality such decisions are mainly made by politicians. By definition, a political decision is made when a choice has to be made between non-comparable entities. When an objective basis is available, the decision is no longer a political decision.

For example, the outcome of a political decision is that coastal maintenance should be carried out by artificial beach nourishment. The quantity of sand to be supplied should be enough to compensate for the average beach erosion. Possible methods are small nourishments annually or bigger nourishments with longer intervals (couple of years). The choice between these two alternatives can be based economic and morphological analyses, and should not be subject to political decisions. However, larger nourishments every couple of years require a larger initial investment. In case the money required has to be borrowed from a bank, interest should be paid. Based on that, politicians may decide to select the first option (annual nourishments), even if the total costs would be higher.

### 5.2 Parties involved

Decisions on future development have to be made for the Porto More Region. The parties involved are:

1. National Government

Recently, the national government received a loan from the World Bank for regional development in the Porto More Region. However, the World Bank demands a sound investment plan, which should include environmental aspects.

A second item to be mentioned is that the national government is responsible for maintaining Law and Order. The police is directly under the jurisdiction of the Ministry of Justice. The present situation shows that law enforcement is difficult, as funds are rather limited. For instance, only limited means of transport (old cars) are available for the police. One of the effects is that the crime rate is too high and still increasing, mainly caused by the high inflow of people from rural areas into Portharbor. The main problem area is the illegal housing area in the outskirts of the city. Main

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\(^1\) A scenario-parameter is a parameter which has a large influence on the result, but which you cannot predict; examples are: price of commodities, climatic changes, population growth, some environmental changes.
causes of this problem are low educational level, high unemployment rates and consequently much people without regular income.
Another aspect to be mentioned is the absence of a Coast Guard, so the law enforcement in the coastal waters (also a task of the police) can not be implemented.

2. Porto More Provincial Authority
The Porto More Provincial Authority is responsible for the environmental conditions and physical planning in the region. The policy of the province is that illegal housing should be removed, and that the development of new squatter-areas should be prevented.
The creation of natural reserves is a very important political item, and should be stimulated.
All big plans needs approval by the provincial authority. This approval depends mainly on Environmental Impact Assessment studies, made for the projects. Environmental drawbacks of a project should be mitigated as much as possible.

A special point of concern for the provincial authority is that they do not want to overinvest. When there is an overinvestment, there will be an enormous rise in employment in the area, but only for a short period. During this period, a lot of people from the countryside will go to Porto More, and after a few years they will be unemployed in that area. This finally causes problems both in the urban area (too much people) as well as in the countryside (not enough people any more).

3. Municipality of Porto More
The municipality of Porto More aims at creating maximum employment opportunities for its increasing population in a sustainable way. Elections for the local council men are next year. The present council wants to decide on items, which are very favourable for re-election.

4. The Porto More Harbour Authority
The harbour authority as a governmental body, in charge of the management and operation of the port. They are hierarchically directly under the national government (ministry of Public Works), but are allowed to act quit autonomous.

5. Labour Union
The Labour Union represents the "workers", however, only workers from the industrial sector (mainly from the fertiliser company and dock workers) are members of the Union. The policy of the Union is to improve the financial and social position of the lower working class. This also means that decreasing the unemployment is an important item for the Union.

6. The Port Operator
The Porto More Porte Operator is a private company who has leased from the Port Authority the right to manage all port handling operations. This company is of course very interested in expanding the throughout in the port. Sufficient depth and no congestions are very important. They have planned to make a new container terminal with all modern facilities.

7. The fertiliser Industry
This company exists already many years in Porto More, but because of the economic revival in the country they expect a large market. Also they are keen on exporting fertilizer. So they have plans to expand all operations. At this moment the industry is rather polluting. They cause a lot of air and water pollution, and are one of the main sources of the heavily polluted bottom of the harbour and the lagoon.
8. The dredging industry
Dredging is required to bring the harbour basins and the access channel to the required depth. However, a lot of the material on the bottom is very polluted. The industry has developed modern technologies to remove the polluted material from the bottom without polluting the water, process the mud, and dump the material in a controlled way. Of course this is much more expensive than normal dredging.

9. The Chamber of commerce
The chamber of commerce represents all industry, but especially the smaller industry in the region. There are many small factories, all with their own economic and environmental problems.

10. The fishery sector
The fishery sector in Porto more is rather traditional. It is mainly artisanal fishing. There are plans to improve the fleet, and to work in a more economic way.

11. Lagoon League
The Lagoon League is an environmental pressure group, consisting mainly of higher class, well educated and influential people from the region. The policy of the League is to prevent economic growth when this growth is at the expense of the environment. They want better enforcement of the environmental regulations (prevent dynamite fishing, preserve salt marshes and other wetlands, prevent uncontrolled dumping and discharge of waste and other effluent).

So, there are three levels of authorities (the rural council and the municipality are on the same level) and several Non Governmental Organizations (NGO’s) and private companies involved.

Objectives of the stakeholders

- Municipality
  - increase of income on short term
  - increase of employment rate on short term
  - diversification
  - clean environment, especially clean air, if possible also clean water
  - marine sanctuary

- Province
  - unanimous decision by all parties involved on the long run a sustainable development

- Harbour authority
  - investment in cargo handling and dredging
  - clean water, clean mud

- Ministry of finance
  - a high rate of return on investment
  - investments in sector with high multipliers
  - good diversification

- Ministry of Environment
  - environmental parameters acc. to standards
  - creation of marine sanctuary
• Ministry of Public Works. good working harbour
  railroads, etc.
• Chemical industry investment in sector
  treatment costs paid by national government (from loan)
• Dredging industry High investment in dredging/mud treatment
• Port operator investment in transhipment
  dredging should be done, preferably by national government
• Fishery sector investment in sector
  clean water and clean mud
• Chamber of commerce investment in sector
  clear rise of income
  clean air
  clean water
• Labour jobs, short term
• Lagoon League marine sanctuary
  extreme strict quality standards to be maintained

5.3 Decisions to be taken
There are several groups with each their own interests, objectives and policies in this region.
The following question has to be solved:
What is the position of the national government, the provincial authority, the rural council
and the municipality, regarding the following plans:
  investing in more cargo handling
  investing and developing new Fertilizer industries
  cleaning environmental conditions (air, water, bottom)
  creation of a national marine sanctuary
  investing in minor industries
  improve fishery sector
  where to realize urban development

5.4 Decision making process
There are several models, which can be used for decision and which depend on the political system.

The county council in the US is quite an important body for decisions like this. Before a key
meeting of the council, all parties involved try to convince the various councilmen as much as
possible through lobbying. During the council meeting, one or several motions of the councilmen will
be discussed and have to be voted on by the council.

In the Netherlands, decisions like this are also made by national, provincial, rural and municipal
councils. However, the civil servants of each governmental body try to prepare a compromise,
which is acceptable for all parties. So, the amount of "fireworks" in the council-meeting is much less than it is in the US. When the compromise is sent for approval to the councils, it is quite sure that it will be accepted. However, sometimes no agreement can be found on some details. In such a situation, alternatives are presented to the council, which can be considered political alternatives. Consequently, a political choice can be made. This implies that most of the work is done in the meetings by the civil servants of each council, where it is important to include the views of the non-governmental organisations. Otherwise, the results will be voted down by the council.

In this simulation game the system is simulated as it exists in the Netherlands and many other European countries. Because decision-making in developing countries is much less regulated, it is very difficult to simulate that process, without going into details on the exact balance of powers in each country.

5.6 The simulation game

The game simulates a session of a coordinating meeting of civil servants from the national government, the province, the port authority and the municipality. The task of all these parties is to formulate a proposal to their councils for the development of the Porto More Region. In this meeting a compromise for conflicting points has to be formulated. So first the conflicting points have to be found. Then the compromise needs to be formulated, together with the pro's and con's, which is acceptable for the national, provincial, rural and municipal councils.

During the meeting, there are "observers" from the NGO's. These "observers" try to influence the compromise in such a way that they can satisfy the wishes of their supporters.

Preparation
Each group receives all information, reads the policy careful, and formulates a strategy.

Lobbying
The NGO's are going to meet "their" authority to plea for their cause. Important items are technical arguments and political pressure.

Meeting of the Regional Development Board (RDB)
The meeting of the RDB is chaired by the chairman of the Provincial Council. It is a public meeting. The discussion takes place between the authorities; the NGO's are only observers. However, during the meeting, or during the breaks, authorities may consult the NGO's. The specific task of the chairman is to realise a compromise, which will be acceptable for all parties involved.

The results of a meeting will be a short document, which gives information on:
- proposal for voting in the four councils;
- overview of the political choices, which can not be solved on the civil-servant level. It is necessary to indicate which council has the authority do decide on specific problems.
Financial aspects
Not all investments have to be done from the World Bank loan. Some private companies will also invest from their own funds. However, usually they will request partial funding from government funding. For the economy it is important to stimulate private investments. This means that it might be wise to invest in those sectors with a high "multiplier". The exact multiplier used by the various private sectors of course depends on their own financial policy.

Evaluation
After the game, the course leader will present some observations, which will be followed by a discussion between the participants on the reality level of the simulation game for each particular country.