# The Impact of Sida Financed International Training Programmes

A case study of the Philippines

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Department for Infrastructure and Economic Cooperation

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Sida Evaluation 98/31

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### **Table of contents**

1.	Introduction	1
	<ul> <li>1.1 Purpose of the evaluation</li> <li>1.2 Evaluation team and work plan</li> <li>1.3 Method</li> <li>1.4 Validity and reliability</li> </ul>	1 2 2 5
2.	Context of the development cooperation	7
	<ul> <li>2.1 Development issues of the Philippines</li> <li>2.2 The framework for development cooperation between Sweden and the Philippines</li> <li>2.3 Experience of the international training programmes</li> </ul>	7 8 9
3.	Description of the training programmes	12
	<ul><li>3.1 A review of the courses being evaluated</li><li>3.2 The technology transfer of the training programmes</li><li>3.3 Anticipating impact during training</li></ul>	12 13 14
4.	Impact analysis	15
	<ul><li>4.1 The meaning of impact</li><li>4.2 Extent of impact</li><li>4.3 Types of impact</li></ul>	15 16 19
	Affecting legislation, rules and codes of conduct Initiating organisational change Achievement of specific tasks Disseminating information Personal development	19 21 23 25 27
	4.4 Tracing patterns of impact	28
5.	Recommendations	31

- Annex 1. Terms of reference
  Annex 2. The 3 best entries to the essay competition

#### **Executive summary**

The Philippines has participated actively in the Sida sponsored international training programmes. More than 600 persons have taken part in one or more of the 60 different programmes, at a total cost of 45 million SEK. One third of the participants were female. There has been a concentration of participants in the fields of environmental management, energy and industry. Many participants came from private firms, but the majority were based in the public sector. Sida has commissioned the present evaluation to learn more about the impact of the training programmes. The evaluation was undertaken in August and September 1998. It is based on interviews with a judgmental sample of 65 persons, as well as on 27 essays about training impact and organisational change, written by former participants.

The evaluation distinguishes between "high", "medium" and "low" impact from the training programme. It was found that 41% of the participants make very good use of the training programme, and that the exposure has lead to a high impact on their job behaviour and on the organisations they work for. To the extent that this impact can be quantified, it is estimated to have yielded benefits of at least ten times the cost of the training. Another 44% were found to make rather good use of the training, but the impact was distinctly lower than the above mentioned group. Still, there was no doubt that moderate multiplier effects were realised from the training, and the costs could be fully justified. That means that a total of 85% of the participants made good use of the training experience, which must be considered a very satisfactory result.

Nevertheless, 15% made little use of the training programme, either because they did not learn much, or because they found no opportunity to apply their knowledge. This does not prevent that they benefited from the training personally, but it has had limited impact on their work. Even though 15% is a rather small figure, it is still a considerable expense, and there is no reason not to reduce that figure to nil. (After all, it means that 120 persons, at a total cost of 9 million SEK, have made little use of the training). The knowledge of underlying factors that make for an effective and successful transfer of technology through the training programmes are well-known.

The evaluation shows that impact can take many forms, and that there is no one participant who applies new knowledge in the same way as any other. However, we can point at a number of different types of change that occur as a result of the training.

A really significant impact is when the participants come back from the training with models of <u>institutional change</u>, such as changing government policy which is reflected in legislation. One participant influenced legislation on logging and the use of timber clearing allotments; another influenced the Act on environmentally hazardous substances. The Government's list of toxic chemicals is based on Swedish models which were presented in a programme on hazardous waste management. A relatively small number of participants accomplished changes of this nature - 12 according to our records.

Yet another type of impact is when people change the way their organisation conducts its tasks; that is, in <u>organisational development</u>. The exposure during the training can provide people with new ideas on how to restructure their firms, or departments, or on how to redesign work flows and other organisational processes. Training programmes in quality management have often led the firms to reorganise maintenance functions, and to involve the labour force in continuos process improvement through a variety of changes, such as quality circles, incentive schemes, maintenance routines, internal training, etc. The evaluation also documents how a municipality reorganised to be better prepared for environmental disasters, and could evacuate and feed people effectively during recent floods.

The training programmes make people more <u>effective</u> in their daily job behaviour. One former participant was convinced that the approaches on land use and management learnt in Sweden helped her company formulate and win a tender for a five-year integrated land use project, which of course was an immediate and direct gain for the company. An officer in the Cost Guards had immediate use of the knowledge gained in the course on Marine Environment Protection when he was put in charge of the clean-up operations after a bad oil spill in the Laguna de Bay.

It is important that the technology transfer realised through the training does not stay with one person. Indeed, most of participants are actively engaged in <u>disseminating knowledge to others</u>. One person has more or less designed a similar course which he is now teaching. Many hold seminars for two or more

days where key areas of the training in Sweden is used. Some of the former participants reach out to several hundred others in this way. Then there are also those who conduct shorter lectures, maybe for a few hours. Again, some have reached out to audiences of several thousand people, but most naturally reach smaller audiences. Rough estimates indicate that some 14 000 persons have been exposed to at least a part of the programme contants by these 78 participants.

Participation in the training programmes also leads to <u>personal development</u>, not least through increased international exposure. A vast majority keep in contact with participants from other countries, both for professional and personal reasons. For many, the opportunity for training has had immediate effects on promotion, and in some cases has also encouraged or facilitated career changes.

The evaluation has a sufficient number of data sources to be able to identify patterns of more effective utilisation of the training programmes. Even though more than 50% of the participants came from the Metro Manila area, it seems as though those who came from smaller cities, or provincial areas generally made better use of the training programme. Perhaps it is easier to realise changes in a less hectic and turbulent environment than Metro Manila. There is also a small, but marked tendency that female participants realise higher impacts than do men. Similarly, there is a tendency that private firms implement more changes in job behaviour and organisation. However, public sector participants are the only ones to effect legislation, and they also tend to generate more spread effects through lectures and seminars.

The international training programmes have been shown to generate substantial benefits to those who take part and to the organisations they come from. But there is still a minority who has only limited use of the exposure to new technology, visions and ideas. There are two ways to reduce that percentage.

First, the selection process must be improved. A larger number of organisations must be invited to submit candidates so there is a wider choice of competent participants. The screening process must be improved to make sure that those who take part command foreign languages - there are still some who slip through with marginal knowledge of English. It is necessary to assure that the candidates have a position in their organisation that gives them responsibilities to act when they return. Regretably - but realistically - it is prudent to make sure that the candidates do not come from an organisation which is so impoverished that it cannot make any investments or follow-up to what was learnt during the training. It is also advisable to act on the knowledge of the profiles of those who make good use of the training; thus more people from the regions; more candidates from municipalities, NGOs and the private sector; fewer from central government institutions; and it is also desirable to have more female candidates.

<u>Second</u>, most of the training programmes still do relatively little to prepare the participants for their role as change agents. <u>The course contents should be accommodated to include various ways of planning for what happens after the training</u>, and Sida could encourage various ways to follow-up the training; for example through refresher courses, network building, regional workshops, etc.

Our recommendations also encourage the network of course participants to be kept together and the evaluation tool to be sharpened and deployed to support decision-making.

#### Chapter 1. Introduction

#### 1.1 Purpose of the evaluation

The so called "international training programmes" have a long tradition in Swedish development cooperation. The first programmes started already in the late 1970s, in the fields of quality control, industrial maintenance and management. The programmes were administrated by SIDA at the beginning but during the 1980s they became part of the technical cooperation programme of BITS (the Board for Investment and Technical Support). Here they remained until BITS and the old SIDA merged to form the new Sida in 1995. The 1990s saw a rapid development of the programmes; the funds for the training programmes grew. Many courses acquired a strong environmental profile and new courses were added in the social sciences. During the 1998 budget year, Sida will sponsor some 80 different international training programmes.

The programmes aim at enhancing managerial and technical skills in developing countries in areas of strategic importance to economic and social development and in which Sweden has particular knowledge and expertise to offer. Most programmes concern the field of transport, communications, energy, telecommunications, environmental protection and industry. But there are also courses in journalism and democracy, law and development, human rights, conflict resolution, occupational safety and health, et cetera.

The programmes are open to candidates from developing countries from the lower and middle income level. Invitations to nominate participants are sent out worldwide via the Swedish embassies. Organisations from both the public and private sector can nominate candidates, but the final selection of participants is made by the course organisers. A course has between 20 and 50 participants, though most tend to take around 25. Unless there are some very good reasons, no more than 2 participants are allowed from any one country. That makes the courses truly international meeting places, with a potential for sharing of experiences. The courses last from 2 to 7 weeks, with an average of 4 weeks duration. They have become shorter over time. A few years ago a course could last up to 10 weeks.

The international training programmes are subjects of monitoring and evaluation. The monitoring is done internally by Sida, following a specific format of mandatory reporting from the courses, as well as on the site visits by Sida personnel during the training programmes. Evaluations have been undertaken with the assistance of external consultants, and over the past 10 years, a total of 4 evaluations on different aspects of the programme have been undertaken. Their conclusions are reviewed in chapter 2.

At present Sida is discussing the possibilities of supplementing the core of training programmes in Sweden with regional or local courses in developing countries. This is part of an overall concern for the impact of the courses, where it is felt that a stronger local content in the programme would increase the chances that the courses have a high impact on practical changes in the organisations that send participants. The present evaluation

should be seen as an exercise to provide information that can be of use in these discussions and subsequent decisions.

The purpose of the evaluation is to answer two questions:

- (1) to what extent have the participants been able to act as change agents when they have returned from the training programmes?
- (2) what are the effects at the level of the individual person who has been for training and what impact has been created at the organisation that he or she represented while at the programme.

#### 1.2 Evaluation team and work plan

The evaluation has been commissioned to Andante - tools for thinking AB, a consulting firm specialising in evaluation research and methodology. Within Andante, Ekon. Dr. Kim Forss has been responsible for the evaluation design in consultation with Sida, for parts of the interviews and assessment of impact through essays, and has written the final report. Lars Bjern has undertaken a major part of the empirical work through interviews with former training participants in the Philippines, and he has worked together with Benjamin Milano, a national of the Philippines working out of Andante's subsidiary company in Manila. Mr Milano has also provided background information on the development context of the Philippines. The evaluation process started in late July 1998. The field work commenced in August, and most of the interviews took place in September. The empirical data was completed in September, and a draft evaluation presented in October, followed by the final report a month later.

#### 1.3 Method

The first task was to establish practical criteria of success that bear a relation to the evaluation questions. This is often an elusive task, particularly in training, and there may be effects at several levels that have independent and contradictory effects. In theory it makes sense to distinguish four levels of effects from the courses:

- (1) the reaction level; that is, whether the people at the recipient end appreciate the components and think they learnt something new. This is quite important as the recipients often are people with a clear sense of priorities and who have sacrificed other opportunities to take part in these courses. Their appreciation, their critique and suggestions for improvement are worth taking ad notam.
- (2) the knowledge level; that is, whether the participants really did learn something and could be judged to have learnt by an outside, unbiased examinator. In addition to the reaction level, which may or may not have a bearing on the quality of knowledge, this level helps to give an unbiased and professional review of the content of technical assistance.
- (3) the application level; that is, whether the new knowledge can be applied in a working environment. If the new skills are to have an impact they must be used practically (or theoretically, as the case may be), but on the job.
- (4) the organisation level; that is, whether the application of new knowledge changes the performance of the organisation. Does it matter that someone applies knowledge from a

training programme? Does it show in profits, productivity, quality of service? These questions would be answered at the organisation level.

In line with the purpose described above, we concentrated our efforts to the application and organisational levels. These are the most crucial levels to determine the worth or merit of the training programmes. As long as there are no indication of sharply decreasing levels of appreciation, we might conclude that the courses are still appreciated by the participants - at least, we do not devote much of our effort to that level. The knowledge level is best evaluated by some form of knowledge test, which can really only be done in direct connection to the programme. So our focus is on changing job behaviour and what that has meant to the organisations.

Figure 1. Evaluation model of assessment levels.

Reaction level	"Did you like it?"
Knowledge level	"Did you learn anything?"
Application level	"Do you use what you learnt?"
Organisation level	"Does it make any difference?"

An evaluation always builds on some decision on populations and samples. Sida decided that this evaluation should look only at participants from the Philippines, the reasons being that this is a typical country where the courses should have major impact, and it is a country which has sent large numbers of people to the programme over the years - in fact, through 1997 a total of 583 persons at an aggregate cost of 42 million SEK. The international training programmes stand for a significant investment in development cooperation and technology transfer between Sweden and the Philippines. This seems to merit an investigation of effectiveness in its own right.

These 583 persons are spread over 60 courses. It would be difficult from a methodological point of view to cover courses in as different fields as bank management, artificial insemination, patent application, human rights, women and media, medicines and society, mining technology, cadastral and land use systems, traffic safety management, and digital network management - to name only some. Hence it was decided to concentrate the evaluation on three sectors; industry, energy and environment, and on a total of 12 courses out of the 35 offered in these fields. The reasons for this choice is that these three are key areas in the development cooperation between the Philippines and Sweden. Furthermore, a total of 294 persons attended courses in these sectors; that is, more than half of the total number of participants from the Philippines were in these sectors.

Practically, speaking, we carried out the evaluation by gathering and analysing two types of data; (1) interviews and (2) essays from former participants:

(1) During two visits to the Philippines we interviewed a total of 65 former participants in the training programmes. These were selected from a list of 92 persons who took part in

the programmes. In the selection of interviewees, we took care that all courses should be represented, that there should be a balance between male and female participants, between public and private sectors, and between those who went for training recently and those who took part a long time ago. We have also tried to make sure that there is regional balance, so that not all respondents come from the Metro Manila area.

The interviews lasted between one and three hours, often closer to three hours. We followed a structured but open ended format, which questions focusing on impact and spread effects. It will become evident that the type of impact varies between persons, so once the basic question of what they did to use the training had been asked, we had to follow up with situation specific questions. The interviews were documented immediately, and all the interview protocols were made available as annex 3 to the draft report. (They are not included in this final version). Interviews have the advantage of unbiased questioning, and a critical external look at achievements. But they are an expensive way to get information, and we needed more examples of impact than we could possibly get from interviews.

(2) We adopted the rather unusual method of inviting former participants to take part in an essay competition. The participants were asked to reflective critically on what they had accomplished after the training and to discuss their role as change agents in their organisations. We sent out invitations to a total of 80 former participants, and we got responses from 27.

These essays are wonderful descriptions of how technology is transferred through training programmes. They constitute rich descriptions of what the effects can be when the right people are chosen for training, when they return to a supportive environment, and have the visions, stamina and skills to use the training to the advantage of themselves and their organisations - and eventually for the development of the country.

But the essays do not tell about those who failed to implement changes - we must realise that there is a strong bias to select the best examples through this method. On the other hand, we know through the unbiased selection of interviews, as well as from previous evaluations, that these good examples may constitute between 20% and 60% of the total population going to Sweden for training. In the Philippines, it seems as though the major part of the trainees make good use of the training. The essays serve to describe how the training is used and for what purposes. All the essays were enclosed as annex 4 to the draft report, in unedited form. In this final report, we only enclose the three best essays, as annex 2. The reader who is interested in the others can of course get copies from Sida. In the main text of the evaluation we use excerpts from the essays - as well as from the interviews - to illustrate the discussion of impact from the training programmes.

#### 1.4 Validity and reliability

The question of whether our evaluation results can be trusted or not depends on what type of impact we consider. The reader should have the following aspects of the evaluation in mind:

(1) We looked at twelve courses, and we do not claim that our results say anything about any of the other courses found under the international training programme. It is not possible to generalise our findings to a total impact from the other courses in the Philippines, though it may be tempting to do so. It is absolutely not possible to generalise from these 12 courses in the Philippines to their impact elsewhere. The evaluation may

throw light on some of the mechanisms whereby impact is created, but the extent of impact must be analysed anew in each particular case.

- (2) The interviews were conducted by Lars Bjern, Kim Forss and Ben Milano; a relatively international team The findings are very similar. Hence, the nationality of the interviewer and the possible bias that may arise from this must be considered negligible. Interviewer bias intended or unintended- is otherwise one of the main problems in unstructured, open-ended interviews in a multicultural setting.
- (3) There is probably a positive bias among the essay entries. Those who have not achieved any impact are not likely to take part in an essay contest such as ours. The essays are not intended to prove how many that made good use of the training, but rather to show the ways and means through which impact is created, and to illustrate how impact can be described and measured.
- (4) The time span from participation in the programme to effect at work is important. Around 3 to 4 years is probably an ideal time to measure effects and that is also the mean time our interviewees had from the course to our visit. Some of those who took part in the programme up to 10 years ago found it difficult to remember what exactly the course had meant, but those who took part very recently often had not had the time to implement any verifiable changes.

With these reservations in mind, we think that the reliability and validity of our findings are very high. But the results must be treated with care, and one cannot generalise either to a general notion of impact in the Philippines, nor to impact in other countries. We hope that the practical examples show what type of impact is created, which will give a detailed knowledge of the technology transfer through the international training programmes, and that this will guide decision-makers on the processes through which it is created.

We have kept the main text of the evaluation rather short, but we would like to point out that the empirical material is available in the annexes. In particular, the essays in annex 2 are worthwhile reading - and can be picked up at random for those who are interested in hearing the evidence directly from the source.

As a final reminder, the draft report in October contained all the empirical verifications of our findings in the form of interview protocols and essays, as well as the tools to gather these data. This consisted of almost 150 pages of documentation. As the final version is intended for wider reading, we agreed with Sida that it would be unnecessarily costly to copy all this material. The main thing is that the documentation is available and has accompanied the first evaluation report we delivered. The process thus have the necessary transparency and factual, empirical basis. Those who are interested can have full access to the sources. In this report, we only include the three best essays, as a sample of how the participants themselves describe the impact of training.

#### Chapter 2. Context of the development cooperation

#### 2.1 Development issues of the Philippines

Until the onset of the Asian crisis last year, there were good reasons to be very optimistic about the development of the Philippines. Political stability, together with a vast improvement in the state of peace and security, economic structural adjustment and stabilisation reforms over the past 10 years brought a period of high-performing growth to the country. Gross national product has progressed from being negative in 1985, to a small positive growth of 0.8% in 1992, and to a 6.8% increase in 1996¹. It was still rising in 1997, driven by stronger exports and investments, when the economic crisis in the region commenced. Even though the Philippines has not been hit as strongly as many neighbouring countries, it suffers from their malaise.

With economic growth, poverty has declined from 59% in 1961 to 39% in 1991 and to 35% in 1994<sup>2</sup>. Still major challenges threaten the capacity of the Philippines to sustain human development. The number of poor people was estimated at over 20 million in 1994. Over 47% of the rural population is poor. In some regions and provinces, poverty incidence has either remained stationary or worsened. The labour force unemployment rate was 9% in 1996 and has shown no improvement over the past 10 years.

The resurgence of economic growth has led to rapid degradation of the environment. The quality of air and water is deteriorating at disturbing rates, particularly in urban areas. Acute water shortage is anticipated. Pollution from industrial and human wastes, soil runoff, destructive fishing practices, population pressure and uncontrolled tourism have caused serious degradation of coastal zones and depletion of marine resources. The forests are also critically endangered. Less than 5 million hectares of forest cover remain, and should the present annual depletion rate of 100 thousand hectares continue, the country will be devoid of forests by early next century. The disappearance of forests implies extinction of biodiversity and loss of soils and water retention capability. The poor are, as usual, the most affected as they rely more on natural resources for their livelihoods.

Sound governance faces many challenges. National government agencies are undergoing change and reconfiguration of functions as a result of legislation adopted in 1991 under the Local Government Code. Many local government units lack the structure, management systems, leadership and technical competence to meet the complex requirements of decentralisation. The expanding economic role of the private sector calls for continual examination of the role of the State - including the judiciary, which is increasingly called upon to decide on matters affecting the economy and to dispense justice more effectively, especially to the poor and disadvantaged. These are challenges that need to be addressed, by the government of the Philippines on its own and in cooperation with foreign agencies. The priority issues in cooperation between Sweden and the Philippines should be viewed against this background.

<sup>&</sup>lt;sup>1</sup> UNDP. Country Cooperation Framework. 1997

<sup>&</sup>lt;sup>2</sup> HUman Development Report, 1998, UNDP, New York.

### 2.2 The framework for development cooperation between Sweden and the Philippines

The Philippines is today a major partner in Swedish development cooperation. In the calendar year 1997, disbursements amounted to 120 million SEK, compared to 107 million SEK in 1996. There is no country allocation for the Philippines in the Swedish aid budget. Each project is judged on its own merits. In May 1997, the Swedish government decided on a Country Strategy for our development cooperation with the Philippines, with the following main features:

- The development cooperation shall have as its objective to transfer Swedish know-how and technology to the Philippines in order to support processes and institutions, which are essential for a continued positive economic and social development, for a consolidation of democracy and for an ecologically sustainable development.
- Support to Mindanao shall be given special consideration.
- An increasing share of the cooperation programme shall be devoted to environmental projects.
- The development cooperation programme shall be designed in a way which is conducive to an enlargement of the cooperation in the economic and other areas between Sweden and the Philippines.
- The cooperation should take place mainly in the form of technical assistance, support through Swedish non-governmental organisations, international training programmes and concessionary credits

In the following we will briefly review the contents of these three instruments. Under the technical assistance programme Sida undertakes to finance contracts between Swedish and Philippine partners on transfer of Swedish know-how and technology. Within the technical assistance programmes, priority is given to the strengthening of the Philippine capacity to alleviate poverty, to promote social justice and to improve environmental protection. The disbursements for technical assistance in 1997 amounted to 16 million SEK (2 million USD).

International training programmes are the second instrument. Philippine applicants have done very well in the selection of participants over the years. In 1997, 72 Philippine citizens participated on scholarships amounting to a total of 4.9 million SEK (615 000 USD). There is an inter-relationship between the training programmes and technical assistance projects. It is probably no coincidence that all projects fall within the area of some training programme, and that those who have consultancy contracts very often also appear as organisers, lecturers or study objects in the programmes.

The third instrument is concessionary credits. The Philippines is eligible for concessionary credits from Sida, either with a 35 or a 80% grant element. In recent years, one credit of the former category has been granted for a high-voltage transmission line from Leyte to Luzon, supplied by ABB. The grant element of that credit amounts to 320 million SEK (41 million USD) over the period 1995-97. For this project, 85 million SEK (10.6 million USD) were disbursed in 1996.

A concessionary credit agreement of 18 million SEK (2.25 million USD) with 64% grant element was signed in February 1998 for equipment relating to the cadastral support for the Comprehensive Agrarian Reform Programme (see point 4 in the list of technical assistance programmes above). Currently, several new credit projects are under

consideration at Sida headquarters, some of them in relation to technical assistance projects mentioned above. We can thus take note that there is indeed a link between international training programmes, technical assistance and concessionary support, where the three instruments serve to extend and intensify the level of cooperation, and where the grant element is gradually reduced to approach commercially viable forms of exchange.

Before proceeding, we should note that a number of Swedish NGOs are active in the Philippines. Normally, their activities are supported by public development cooperation funds in a way that 80% is covered by Sida and 20% by the Swedish NGO. In 1997, aid through Swedish NGOs amounted to 7.5 million SEK (900 000 USD).

#### 2.3 Experience of the international training programmes

The international training programmes have been evaluated four times by external, independent evaluation teams. The first major study of impact and effectiveness was commissioned by BITS in 1991. This study gathered data through questionnaires to former participants in the courses, and through follow-up visits to a number of organisations in Egypt. The authors concluded, inter alia, that:

- the participants were very satisfied with the programmes. 90% of the respondents found the contents of the programmes "just right", 65% found that the programmes were well suited to the needs of developing countries, and 68% thought they would be able to use what they learnt to a great extent.
- the majority of the participants were very satisfied with the competence of the teachers, and they thought the length of the programmes suitable. Somewhat less than 50% thought the programme was too comprehensive.
- the balance between subjects was well maintained. The theoretical contributions were most appreciated, as were study visits and other loosely structured opportunities to get ideas and "visions" during the visits in Sweden. The practical applications were less appreciated, and the personal contacts though much acclaimed had less importance.
- somewhat more than 50% of the participants were found to have direct and clear use of what they learnt in their daily work. In these cases, the evaluators also found that the changes introduced by the participants yielded substantial benefits to the organisations they worked for.
- but the knowledge transmitted during the courses was mainly used by some few persons, and the spread effects to others in the organisations - or in the countries - were limited or nonexistent.
- the evaluators also concluded that maybe as many 25% of the participants had limited or no use of what they learnt.
- the courses were found to be highly cost effective. The evaluators estimated a multiplier effect of up to 70, that is, a monetary value of the benefits from the training about 70 times higher than the cost of the training.
- the courses were primarily addressing the "growth-target in aid, but had limited relevance for the other objectives of Swedish bilateral cooperation. The evaluators argued that the programme should be expanded so that it has some relevance in relation to the other objectives of Swedish aid (independence, democracy, equity, environmental sustainability at the time).

The evaluation was very positive to the training programmes, in fact, much to the surprise of the agency commissioning the evaluation. But the recommendations were considered by BITS, and many of the changes in strategic direction that followed over the next few years were due to the evaluation. A system of monitoring and evaluation was also set up within BITS, and the next few years the programme officers managed an internal evaluation program, building on questionnaires to course participants at the end of each course, selected questionnaires three years later after the programme, and site visits by the programme officers. The evaluation results were reported to the Ministry for Foreign Affairs in the annual budgeting process.

In 1994 BITS commissioned an evaluation of its assistance to the energy sector in Malaysia. Several courses cover this field (Energy conservation in Industry, Electricity distribution management, Management of Electric Power utilities, Management of hydropower development, and Power systems control and operations). Malaysia had also received technical assistance in the energy sector, as well as mixed credits. Hence BITS called for a total evaluation of its cooperation with Malaysia in this sector. The conclusions in respect of the training programmes were as positive as the previous evaluation, and the training was found to be extremely useful in combination with the other instruments of cooperation.

BITS proceeded to undertake an evaluation of all its development cooperation with Malaysia within the field of technical cooperation and international training programmes. A total of slightly less than 400 Malaysians had taken part in the courses between 1986 and 1994, at an aggregate cost of 25 million SEK. The industrial sector dominated, followed by telecommunications, energy, transport and environment.

The evaluation pointed at a diversity of effects. People who attended the programmes were inspired to do something differently. They did get knowledge, but perhaps most important was the idea, the vision of how things might be done in another way to save money, make money or simply do things better. The evaluators concluded that: "effects that we have seen were considerable and fully justify the costs of the programme. But it remains an open question how many actually do use their knowledge to improve things at work. We are tempted to conclude that quite a few, our guess would be around 30%, make little use of what they learnt. The course organisers must make every effort to motivate and assist all to make sure that the training leads to lasting improvements in their organisations - or at their new jobs."

An evaluation commissioned in 1997 looked at two courses, Industrial Maintenance Management and Project Management, in two countries; Tanzania and India (later, the Philippines was added). However, the findings here differ to some extent. Even though the courses are much appreciated by the participants, indeed as much as other evaluations have shown, the practical results were not as good. A group of around 30% were said to have no practical use of the training, and yet another sizable group of between 20 and 30% had but little practical use of what they learnt.

The evaluators suspected that participants from India and Tanzania were likely to represent environments where the resistance to change - or the resources to realise change initiatives - put a constraint on what it was possible to achieve when they returned from the training. They suggested that participants from resource constrained countries, or countries where the selection process to the course is obviously flawed, make less use of the contents. Countries such as most of Sida's programme countries in Africa, some Central American countries, and a few countries in Asia, were less likely to benefit. But participants from middle income countries, or countries where the participants still may be expected to return to an environment where their application of the learning will be supported will

have a higher impact, such as many of the former BITS countries, South Africa, and perhaps Botswana and Namibia.

In summary, the evaluations of the international training programmes over the last 7 years provide an overwhelmingly positive picture of their impact. The courses are highly appreciated by the participants. To be sure, there are differences. The ranking system of BITS showed that some courses generally were less appreciated than others. There are also cost differences, and some of the most expensive courses were certainly not among the courses that were most appreciated by participants.

The evaluations also point at systemic weaknesses that have not been corrected. The selection process is not sufficiently tight. A large share of those who take part still lack the language skills to follow the courses, and they are not in a position to follow up and implement changes when they return to home. Some are too junior, and others are too old to have the energy to act as change agents. Also, the course organisers seem to leave the participants when the course has come to an end. There is no follow up, and little commitment to assist the participants once they have boarded their flight home. The reader should bear these findings in mind when the results from the present evaluation are presented.

#### Chapter 3. Description of the training programmes

#### 3.1 A review of the courses being evaluated

The international training programmes are divided into 13 sectors, and this evaluation covers three of these; environment, energy and industry. In these three sectors there are 35 different courses, and our evaluation focuses on 12 of these, namely<sup>3</sup>:

Power System Control and Operations
Management of Electric Power Utilities
Energy Conservation in Industry
Energy Conservation in Sugar Plants
Coastal and Marine Environment Protection
Hazardous Waste Management
Ground water Supply for Urban Areas
Solid Waste Management
Risk Management in Community Development Planning
Total Quality Management
Management of Forest and Wood Industries
Quality Leadership Seminar

The courses last approximately 4 weeks and take around 25 participants. One course differs from the others in that it is split in two parts. The first part is the longer and is arranged in Sweden. The second part is arranged in a Third World country, and participants attend according to which region they belong to. Those from Asia took part in a follow-up course in Pakistan. The last course on the list is, as the name implies, a seminar, lasting for two weeks. The remaining ten courses are rather uniform, consisting of a similar mixture of theoretical lectures, group work and study visits.

Each course is presented in a pamphlet which describes objectives and content. We will not review the objective of each specific course here, they are in fact rather similar. The objective of the course on Energy Conservation in Sugar Plants can be quoted as an example:

"The aim of this course is to provide know-how in the field of energy conservation and to provide the basis on which personnel responsible for energy matters from sugar plants in developing countries can convert Swedish experience and Swedish technology into practical measures for their own industries."

It is quite possible to exchanging the technical field in this statement for any other, for example solid waste management or power system control. The sentence captures how the objectives are expressed and what the courses are about. None of the organisers express objectives in a more substantive fashion, and we have the impression that they neither dare, nor can be, more concrete about what the programmes are expected to achieve.

<sup>&</sup>lt;sup>3</sup> the addresslists that we used to contact people both for interviews and for the essay competition were not quite accurate and they also included people who had actually taken courses other than these. When we found that a person had taken another course, we still continued the conversation. They are included in our total sample and treated like all other informants

#### 3.2 The technology transfer of the training programmes

The history of development cooperation is also the history of technology transfer, in fact, technology transfer is the "raison d'etre" of aid organisations. There are thousands of volumes on the subject. Much of the debate and even more of practice rests on the eurocentric notion that there is a source of expertise, in the North, possessing mastery of technology, and there is a recipient in the South, to whom knowledge is transferred. There is an active "sender" and a "passive" receiver.

Traditional technical assistance make the model operational through contracts between buyers and sellers of technology, through expert services, training programmes and the like. However, all these instruments of technology transfer presuppose that the buyer/receiver knows what he or she wants to attain, or what their particular organisations need.

The international training programmes are interesting in that they do not really build on this rather mechanistic model of technology transfer. Instead, those who take part in the training programmes are presented with a veritable "smörgåsbord" of ideas, visions, tools and instruments, from which they can pick and choose at their leisure. Technology is not transferred, as in the traditional expert - counterpart model. Instead, technology is picked up by the participants if they see a need for it, if they get interested and enthusiastic.

The international training programmes are an opportunity for the participants to pick and choose from a very wide variety of inputs, but they have to define on their own what they think is useful and what they can apply. The interaction between colleagues from other developing countries plays an important role in this process.

The financing organisation, Sida, and the course organisers, play a very different role compared to other means of technology transfer - they must leave much more to the discretion of the participants, they cannot be as paternalistic and authoritarian in respect of what is need, how it should be transferred and applied as in other aid processes. They must be far more responsive to the demand from the "recipients".

From this it should also be obvious that the international training programme is a form of development cooperation which places far more responsibility for the final results on those who are to take on new knowledge. If the technology transfer fails, it is quite likely that it fails because the person who took part did not have the aptitude to recognise the opportunities for change he or she was presented with, or perhaps he or she did not possess the skills and initiative necessary to "pick up the ball and run with it". This does not preclude that the organisers could fail to present a tempting menu.

#### 3.3 Anticipating impact during training

Even though the participants are responsible on their own for what happens after the training, they could be more or less supported or encouraged to use something from their training experience. There are many ways in which a practical training programme can enable participants to use what they have learnt; such as, making plans for changes at home already during the training, follow-up courses at regional or local levels, or downright counselling on how to change organisations.

The training programmes do encourage people to return as change agents, still, being a change agent is a skill in its own right, which can be analysed and developed. None of the courses that we have encountered here did anything to prepare the participants in their role as change agents. Among the 80 courses in the international training programme, there are some few who spend more time and thought on how to prepare the ground for a high impact - for actual changes in job behaviour. We regret to say that the courses covered in this evaluation do not appear to have any such components. None of the interviews, nor any of the essays, tell of inputs from the course organisers that actively support or encourage them to undertake changes when they return home.

All the previous evaluations that we reviewed in chapter 2 emphasise the need to do more to support the participants to make use of the training, and it is quite clear that this evaluation can only repeat that message.

#### Chapter 4. Impact analysis

#### 4.1 The meaning of impact

Our terms of reference clearly say that assessment of impact is the major task of this evaluation. In the chapters above we have described the methods to assess impact, the development context, and the knowledge we already have of the programmes that are supposed to have an impact. It is now high time to turn to the real question of whether there was any impact, and if so what.

So what do we mean by impact? Impact is a word used with many meanings, and it is often rather confusing. In an evaluation like this it is necessary to be clear. In the context of training, impact can mean many things; first of all it is reasonable to argue that impact means that the person taking part in a training program learns something. If he or she learns, then the training has had an impact. There is a common-sense logic to that proposition.

Second, the training experience creates an impact when it leads to changing job behaviour. When a person reorganises the maintenance function in her firm after having been exposed to new knowledge on quality circles, the training has had an impact beyond the immediate transfer of knowledge. It presupposes that learning has taken place; that the first level of impact has been accomplished (c.f the model of training effects that was introduced in chapter 1). We reach a third level when we discuss what effect the application of new knowledge has had; for example, how much has been saved when the lead time to service machines is reduced, or when unplanned interruptions to the production process are reduced by 85% due to better maintenance procedures.

This study focuses on what people have done, on changes in job behaviour. This is a direct and visible level of impact, and one of immediate interest for those who finance and organise training programmes. Knowledge about what changes that do occur is a precondition for any assessment of the usefulness of the knowledge transfer. We do occasionally assess the value of these changes, but mainly in qualitative terms, or at times with some rudimentary quantitative analysis.

One striking observation is that there is not one example of impact which is quite like any other. Hence it is very difficult to compare, and also difficult to arrive at a consolidated measure of impact. In the following we will try to address some specific questions that arise out of the discussion of impact, and we will illustrate the points made through brief summaries of interviews and excerpts from the essays.

#### 4.2 Extent of impact

During the evaluation we have impact assessments from 28 essays writers and we have undertaken 65 interviews. However, 15 of the interviewees also wrote essays, so there is a only total of 78 persons that gave some testimony. The data points at some form of impact in terms of job behaviour in all these cases, but naturally some achieve more than

others. If we translate the real achievements into a qualitative judgment of whether they achieved much, or only a little, more than 41% have achieved quite a lot, fully justifying the costs of the training programme and with significant spread effects in the country. There is a small minority of around 15% of the interviewees and some few essays where we must conclude that the impact is, so far, limited - or where most of the effects remain to materialise. In between we have 44% of the persons, who have made some use of the training and where the impact is visible and of an extent which certainly justifies the expenditure on the training. The results are presented in Table 1.

We refer to these three levels as "high", "medium" and "low" levels of impact, but remember that this is a qualitative judgment from us. The reader could refer to the interview protocols and essays for a closer description of the case, and perhaps make his or her own judgment. Let us quote one example of impact, which also shows how relative that measure is. Mr. Labis took part in the training program on Power Systems Operation and Control in 1992. He comes from SEPALCO, a small power utilities firm in Cagayan del Oro on Mindanao. SEPALCO has 350 employees and five have been to Sweden for training, two in the Power Systems program, and three more in Electricity Distribution Management. The main point of the training is to acquaint people with the operation of SCADA systems. As the firm has not yet installed any SCADA system, we might conclude that the knowledge has not been put to use.

Table 1. Estimate of aggregate impact from the training programmes

	Number of persons	Percentage of total
High impact	32	41%
Medium impact	34	44%
Low impact	12	15%
Total	78	100%

That answer would be superficial though. The company has been investigating the issue, and there was some top management concern about the financial feasibility of such a system. As it is a privately owned company, the owners keep a tight fist on the purse. Mr Labis would have liked them to proceed more rapidly with investments in a SCADA system. He has been preparing investment proposals, and a more detailed feasibility study was done in 1997, with grant aid from the U.S. The decision was taken to go ahead, but then the recession hit, a major customer closed down (a steel mill in Cagayan del Oro), at the same time as the owners diversified into electricity generation. They are still going ahead slowly and cautiously, and have put parts of the SCADA system on tender. As it is now 6 years since Mr. Labis took part in the training, we might have come to the conclusion that the impact was rather small.

However, impact is found not only in what one does, but also in what one chooses not to do. Mr. Labis mentioned that several other power utilities in the Vizayas were interested in investing in SCADA systems. Companies in Davaos and Cebu had for example been faster in buying such systems than SEPALCO has been, but their approach differed. They had not specified the requirements for systems functions, which was one of the things learnt during the course. They had only specified technical requirements. Hence, when they

received tender proposals, only one company fitted specifications and was awarded the contracts. These power companies are now supplied with suboptimal SCADA systems, which they do not understand properly and which cannot be developed to cater for larger volumes or more sophisticated measurements.

By having a better knowledge of the systems, through the training programme, this company has avoided making these expensive mistakes. As the investments are in the vicinity of more than USD 1 million, this represents significant savings, and a good return on the investment in training. We would thus conclude that the training has had a medium level of impact; medium because there are many who have significantly higher levels of achievement, and because even though the visible change in the company is almost nil, the job behaviour of Mr. Labis has changed and brought considerable benefits to the firm.

Let us also look at the example of somebody who has realised a high impact from the training programme. Ms Conchita Ragragio took part in the training programme on Solid Waste Management in Gothenburg 1993, with a follow up seminar in Lahore, Pakistan, in 1994. When she took part in the programme she was Executive Director of the Green Forum of the Philippines, a national NGO-network. In her essays, she describes the impact of the programme as follows (our abbreviation of the full text):

"In 1994, I designed and conducted a community based resource recovery and recycling program funded by the Coca Cola Foundation. The participants were mostly women from Barangay Batasan Hills, and community residents close to Ayala Alabang. The training aimed to give community residents incentives for recycling and backyard composting by emphasising that waste is a resource and that money could be made from managing household wastes properly. The philosophy I adhered to was that change needed to start at the household level, and that efforts based in communities were keys to success of a municipal solid waste management program. This mindset has been formed by my background in psychology, and buttresses by observations made during field trips in Gothenburg.

People's participation and cooperation, other cornerstones of the program, found expression in my work with the Governance and Local Democracy project. I am assigned to the environment component of the project, a major concern of which is the municipal solid waste management. My work has focused on the formulation of local integrated solid waste management programs, the conduct of waste appraisal, and the design and conduct of participatory events. Events I have facilitated include multi-sectoral planning meetings, consensus building workshops and seminars.

With a team of environment specialists, I helped develop training videos and training handouts, utilising local talents and materials. Because communication is crucial to the exchange of information and experiences, I was tasked to prepare a paper on "Local Government and Citizens in Integrated Solid Waste Management" and to be the editor of a quarterly newsletter on waste management issues. Both are Gold project publications for local decision-makers and communities. Participating local governments are from many parts of the country, and in all these sites the project has sown the seeds of multi-sectoral participation and cooperation in various fields of governance, but particularly in municipal solid waste management."

The excerpt indicates that the author used the knowledge gained during the training in many different ways, in project design and management, in the design of structures and processes to make larger organisational units operate more effectively, as well as in spreading the knowledge to others. It shows a distinctly high level of impact from the training.

There were also occasions when we had to conclude that impact was low, and more so in the interviews than in the essay contest. Let us point to the example of Mr. Timotheo Ratilla, who is working for the Department of Environment and Natural Resources, at the regional office in Cagayan Del Oro, on Mindanao. He took part in the training programme on Water Resources Management in 1995. The department reviews environmental compliance acts, issues permits for emissions of pollution, supervises and controls the sources of pollution - in the air, in water and of solid pollutants.

It is clearly seen that a programme such as the water resources management programme aims to transmit a broad range of concepts regarding water management, of which pollutant control is only one minor share. Hence, the chances that he would benefit from the whole programme were very small initially. But since he got back, his main concern has been with air pollution and hence the direct job application of what little the course contained on water treatment and pollution control has been virtually nil. But he has had another use of the programme; in his pursuit of a masters degree at the local university, he has often produced term papers based on the material he was given in Sweden. In addition, his immediate boss who lectures at the university uses the handbook on water management in teaching. Even though there are some benefits, we still estimate that the overall impact from this particular training to be rather limited.

As we have now given some examples of what we mean by "high", "medium" and "low" impact, it is time to turn to the aggregate account. Table 1 summarises our assessment of how beneficial the training programmes have been. The reader show note that two possible outcomes are not mentioned; the one is "nil" and the second is "negative". We have simply not come across any examples where the impact has been nil. Naturally, some interviews were very close, but it would be a grave violation of the information given to us, and the statements people made about the training, if we summarily concluded that the impact was nil. Neither have we been able to detect any detrimental effects of the training.

Knowledge can be more or less usefully deployed, and it is not always sure that higher competence leads to more effective use of resources. There could be differences in opinion on the wisdom of a course of action. One example is the essay which describes how the national Councils total ban on logging was counteracted in order to have a careful and prudent use of natural resources, including the pristine forests remaining on the Philippines. Whereas this may seem well and good from a conscientious timber managers point of view, we are sure that environmental groups would not always hold the same opinion. The long-range effects of a total logging ban versus a more liberal view on the outtake of timber and subsequent plantation cannot be assessed in this study.

As Table 1 shows, we have estimated that around 41% of those who have taken part in the training program; that is, out of the 78 that we have either interviewed or received essays from, or both, have made good use of the training. Their activities afterwards have had a high impact - in the various ways in which impact can be assessed. All in all, this is a commendable achievement.

There are also 45%, or 34 participants, whose activities after the training have had a medium level of impact. This is also positive, as we have defined the category to mean that there has been a substantial and positive net return on the investment in training. Together, it means that 76% of the people who have been for training make good use of the results, but some far more so than others.

Nevertheless, there is a group of 12 people, meaning 15% of the total number of persons we have some data from, where the impact is limited. In our opinion these cases could

have been avoided through the means of a more careful selection of participants, better preparation for what to do after the training, and some form of follow-up to support their role as change agents. But most important is the selection process.

#### 4.2 Type of impact

What people do after the training differs widely. In the following we will define and exemplify the major types of impact. We have distinguished between five categories; (a) affecting legislation, rules and codes of conduct, (b) organisational change, (c) achievement of specific tasks, (4) disseminating information, and (5) personal development (which is a far more vague and unspecific category than the former four).

Affecting legislation, rules and codes of conduct.

Depending on the content, the training programmes will often contain a review of Swedish and international legislation in a specific field. Many of the environmental courses contain a review of environmental legislation, others may contain information about professional codes of conduct, or rules and regulations that are either enforced by law, peer pressure of public supervision. Many times these overarching frameworks are crucial for the development, and the exposure to foreign practice may induce the participants to implement similar changes in their home countries. We will quote from the essays to provide some examples of how these effects occur.

"It was during my incumbency as president (of the Philippine Wood Producers Association, writes Antonio Olizon) that many issues cropped up and the association had a lot of public relations to do. For one thing, it was then that our Congress wanted to enact a bill called "Total Ban on Commercial Logging". The bill had been debated in both chambers for several years. The issue divided both houses. There was strong clamour from some sectors who, believing in a very simplistic approach, thought that a total ban on logging operations was the only solution to conserve forest resources. However, the chairmen of the committees on natural resources in both chambers were both non-technocrats; they were both lawyer-politicians.

The public pressure to pass such a bill was so tremendous that the press was inclined not to report, but to support, the proposed law on total log ban. It was incumbent on my part as the president, then chairman, of the wood industry association to lobby for the non-passage of such a bill. We took a different stand. We proposed a bill that called for a sustainable management of forest resources. And yet, we saw the weakness of our position. We only had a handful of timber concessionaires in the country who really put into practice sustainable management of forest resources. ... We explained to the legislators that countries which are successful in forest management, such as Sweden, are not practising a total logging ban. And yet in the Swedish experience, every year the forest resource base is continuously increasing despite the volume that they are harvesting. Moreover, we explained that Sweden does not have voluminous or complicated laws on timberlands. Instead it has a master plan not only on how to manage the forest but also the industries depending on wood for their raw materials.

As president and later chairman of the association, I made presentations to various groups. Again I relied on my training in the programme to give me confidence to make credible presentations. .... What I would usually impart to my audiences was that what we need is a strong political will to implement programmes similar to those of Sweden. .... It might be worth mentioning that this committee chairman was able to have this bill entitled "Sustainable Management of Our Forest.." approved by the House of Representatives. He stood his ground against the proponents of the "total logging ban" bill - and won.

The example shows how a very important piece of legislation was strongly affected by the training programme, and the economic consequences are dramatic. We could safely assume that a total logging ban would have affected hundreds of wood manufacturing enterprises, as well as several timber concessionaires. Thousands of jobs would have been lost. At the same time there would not be any guarantee that virgin forests are better protected - as they are still protected under the bill that has been passed.

Yet another example is provided by Ms. Teresita Liao, an employee of the Philippines Environmental Management Bureau. She took part in the training programme on hazardous waste management, which also covers topics of environmental legislation:

"The training likewise paved the way for the incorporation in part of the Swedish legislation into the Philippine Implementing Rules and Regulations for Republic Act 6969 which came into force in 1996. The salient point is the issuance of Chemical Control Order for chemicals listed at the Priority Chemical List which is the country's counterpart of the Swedish Chemical Control Process, and the drafting of guidelines for the Philippine manifest, licensing and transport system.

...Even the legislation cannot be implemented fully nor can it be complied with, The reason is that the government cannot provide for disposal facilities nor have the money to upgrade existing ones. The passage of the Clean Air Act is still hanging in Congress because of the issues on incinerator, people's acceptability of land fillings and dump site is very low, and budget allocation for environmental protection is not enough to support information campaign and industry compliance needs to be improved. With the present economic crises, how we could deal with the present environmental problems remains to be seen.

With the continuous problems related to hazardous waste management, given the limited knowledge and expertise on the matter, the training and lessons from Sweden in a way strengthened my capabilities in applying the technical know how for the implementation of programs related to hazardous waste management. The support extended through BITS aided the country in the formulation of national legislations, which is the Implementing Rules and Regulations of RA 6969, the Department Administrative Order (DAO) 29. DAOs 38 and 39 for Mercury and Cyanide were published in February 1998 in part patterned on the Swedish legislation."

Even though legislation is one thing and action another, it is obvious that an appropriate legislation is a necessary precondition for any action in the field of environmental protection. Enforcement of laws cannot precede the establishment of laws, but will in the long run be a natural consequence. In theory, it is possible to estimate the impact of changing legislation, for example by assessing the change in the handling of mercury or any of the other hazardous substances, and to estimate the environmental damage which could have been caused by unregulated disposal of the waste. It is obvious that a realistically calculated figure exceeds the cost of training manifold.

It is difficult to realise such gains from the training, and even though it is a very desirable effect, it is only a minority of those who have been for training who do return to change national legislation in some form. Out of the 78 persons who took part in the training, we found that 9 had used what they learnt in this way. But not all was change at the level of national legislation, there were also changes within municipalities, for example concerning risk preparedness, building permits, and other issues. This suggest that around 10% of those who have been for training realise effects of this nature. This may seem to be a small proportion, but the effects are very large, and in fact we are surprised that many are able to document changes of legislation, rules and regulations.

Whatever the subject of the training programmes, the participants will be exposed to knowledge on how the subject matter is handled organisationally. This exposure may provide them with ideas on how to reorganise their activities at home. We will again quote a few examples of how people have changed structures and processes in their organisations as a result of the training.

"When I came back, I was tasked to handle the Community Forestry Program. At that time, the DENR (Department of Environment and Natural Resources) was contemplating on integrating all its people oriented forestry projects. This move invited resistance from the "turf-oriented" offices, a common situation in a bureaucracy. Our office was the integrator ... hence we took the lead of dissolving offices to pave the way for a community based forest management office. The projects that fall under this umbrella simply link with the office and boundary exchange has been established. I participated in the move and even faced the risk of being criticised.

After almost two years now, the organisation has gained from the structural change. There has been better cooperation and less duplication of work. Resources have been optimised. Experiences in projects' implementation have been shared among the persons involved. ... Lesson: in order to get a win-win solution in problems, you must be a good negotiator and aware of conflict resolution strategies. I acted as almost the executive officer of the HEA. In all meetings that I attended in behalf of the office, I consciously used the tools I learned and internalised from the Project Management Course" (wrote Marlea Muniz).

Affecting organisational structures and processes is among the most common effects of the training. It was only 5 out of the 28 essay entries who did not show evidence of such impact, and as annex 3 shows, most of the interviews also had some form of change in this way - except of course some of those who recorded little impact. It would thus seem as some 70% of those returning from the training undertake organisational changes. The impact we record here has been for the better, and in theory it is possible to indicate the value of change - though the quantification in practice is somewhat shaky. One interview provides an example.:

Mr. Abdon Laigo took part in the Applied International Management Programme in 1995. Since his return he mentioned that he has applied much of what they were taught in business strategy, as for example on marginal pricing, utilisation of opportunity cost calculations, and focusing on specific services. The company has been transformed in many ways, and their profitability has increased - in fact, gross profits have quadrupled from less than 10 million pesos in 1995 to some 45 million at present. Mr. Laigo meant that the exposure provided through the training was absolutely essential; it was knowledge and experience gained there which lead the changes in company policy and practice which in turn yielded the profit. Discounting the training during 5 years, and assuming that a tenth of the profit increase can be credited to the training - which is a more humble proposition than suggested by the interview, this still means that the training would be worth some 18 million pesos, which can be compared with the actual cost of 380 000 pesos.

Yet another interesting example is provided by Mr. Renato Santos, who took part in the Maintenance Management Systems in 1988. His example is typical of many who took part in the training in Quality Control, Maintenance and similar courses.

"After the training in Sweden, the first thing we did in the company was to audit the existing maintenance system, then we presented our recommended action plans with complete justification before we started the reorganisation of the maintenance department and implementation of the maintenance techniques and strategies. The top management was

convinced and handed us their full support to the success of the program. The greatest obstacle I experienced at that time was the resistance to change from the older maintenance people. But it did not really matter very much because one of my strategies to gain immediate acceptance of the changes was by conducting in-house seminars on maintenance management and explaining to them how to do the job and the importance of the things we were doing for the company and for ourselves. The training was continuous and we even sent most of them to learn other techniques outside the company. In 1990, the company started to harvest the fruit of the hardships and dedication of each one of us when the downtime of the plant went down remarkably. The plant maintenance group was no longer like fire fighter but more of preventive crew. Preventive maintenance were done on schedule and following the proper procedure within safety precautions.

Maintenance cost was remarkably reduced, maintenance was no longer to be blamed for short deliveries, long shutdowns, delays, etc., because maintenance was in control. .... The greatest thing I felt in the success of this program was the appreciation of the production people when they expressed their gratitude to the whole maintenance organisation and they said, "Our maintenance has improved a lot, they know their responsibility and they did a good work". Since that time, the morale of the maintenance people has gone up and the more they were motivated in their work."

The economic gains are naturally considerable. The essay does not contain any concrete figure, but if the downtime is reduced the savings can be considerable. If a factory is closed for a day due to maintenance problems, the cost for this is probably well in excess of the cost of the training program. The multiplier effects of the investment in training are manifold, and likely to be in multiples of tens. In general, multiplier effects of organisational change are probably not as high in impact as are changes in legislation, but they are somewhat less abstract - while still very high. More than half of those who wrote essays told of some form of organisational change, structural or process reform, which came as a result of the training, whereas somewhat less than half of the interviews provided evidence of organisational change.

#### Achievement of specific tasks

Working through legislation or organisational changes provides a leverage effect to get things done. But it is also possible that a person can get things done without affecting a whole system. Just doing your job better can mean that the organisation gains, or that the person gains. Let us provide a few examples from essays and interviews. First, let us quote from Ms. Nelflor Atienza's essay:

"My first, and I would say biggest contribution to the company, is the preparation of the technical proposal for a project entitled "Conservation and Maintenance of Biological Diversity in Tropical Forests Managed for Timber Production". The proposal was prepared with another forester from the University of the Philippines in Los Banos and Mr. Umalu who reviewed and provided guidance in its preparation. Fortunately, I was able to use some of the materials I got from the training in Sweden. The project was approved by the International Tropical Timber Organisation in 1996 to be implemented for five years."

Writing professional proposals is of course essential for anyone in the consulting business, and it is not difficult to envisage how a training input can have an immediate effect such as this. The consulting company in case was only four months old when Ms. Atienza joined it on her return from Sweden, and to land a five year project is a big achievement. It certainly meant that the training gave a good dividend. An example from a completely different field is provided by Lt. Allen Toribio, who took part in the training programme

on Coastal and Marine Environment Pollution Prevention. A few months after his return from the training he got an opportunity to apply the course contents:

"I was designated as on-site Commander on the oil spill response operation at Malaya Plant at Laguna de Bay. Utilising my gained knowledge from Sweden oil spill response strategy, I immediately organised all the response teams into one response network which the Coast Guard must lead based on the National Oil Spill Contingency Plan. A well organised team is essential for a well coordinated and efficient response. .... A decision was made to conduct containment and recovery at source of pollution to limit further spreading of pollutants. While shoreline clean-up was being done at the same time to affected coastal municipalities utilising local labour surveyed by Coast Guard personnel.

Arrangements were made for media liaison, health care, billeting, supplies, transportation, communications, and food provisions for all the personnel in the operation. .... So far the whole operation went on smoothly without any occurrence of accidents or injury. For that operation, which lasted for almost a month, I was awarded a Military Merit Medal for effectively managing the response operation and for providing expert technical advice to oil spill response teams. Had it not been for the training in Sweden, I will not be prepared to tackle that enormous task of responding and managing the whole oil spill response operation in such an important body of fresh water as Laguna de Bay.

The end result is that the Government of the Philippines was able to prevent further containment of the lake which if not prevented will result in a catastrophic destruction of lake resources specifically the fish sanctuary and the fish cages which supply the food requirements of Metro Manila and adjoining towns and where marginal fishermen relies on their daily subsistence."

We do not know what would have happened if he had not taken part in the training programme. Perhaps someone else had been assigned to command the clean-up operations, and perhaps he or she had done the job equally well, without training in Sweden. However, it does seem likely that the knowledge about techniques and organisation which were taught during the course played an essential role in helping this particular person do a good job, and there can be no doubt that the skills were put to good use.

In theory it is possible to calculate a numerical value of the impact of the training. The starting point could be the value of fish production in Laguna de Bay. Assuming a daily net worth of the catch to be a million pesos, a loss of fishing opportunities for one month would mean lost incomes of 30 million pesos. If the spill had not been contained, such an outcome would have been possible and likely. There are other gains too, on the value of clean water, the reduction of loss coming from an early containment of the source, as well as values coming from an efficient organisation of the rescue operation. The point is that these economic values are immense and far outweigh the cost of the training.

All respondents who have achieved medium and high impact have also provided examples of how the training helped them achieve specific jobs better. Also, many whom we meant had less use of the training still gave examples of how they did things differently. But impact was not as high as in the examples above.

#### Disseminating information

The three categories of impact that we have discussed above all show examples of how those returning from training achieve something of value, such as developing legislation, changing organisational practices, or just undertaking a certain task with more skills and better aptitude. They use the knowledge gained during the training to create a direct effect at the places where they work, or for that sector in the country.

But those who return from the training programmes are also expected to share what they have learnt, to impact their new models, ideas, tools and techniques to others. If they do so, there will be many more who are in a better position to do their jobs. Sharing knowledge is not in itself an impact, but it is nevertheless a desirable side effect from the training. In broader perspective, it means that many more have the opportunity to familiarise themselves with the subject matter of the training. Even if they do not get the whole programme, they do become familiar with bits and pieces of it.

In the evaluation we distinguished between four types of spread effects, four different ways of sharing the knowledge with others. First there are those who repeat the whole training programme, who set up a new course of almost the same content and duration as the one they attended. The courses are not patent protected, and the financier would certainly encourage any participant to copy the programme. But there are not many who have the means to become professional trainers and to institutionalise a programme such as this. We have only seen one example, and that was Lt. Toribo, who was assigned as Assistant School Director of the Coast Guard Training Centre, where he applied the style of training and the contents to design a Coastal and Marine Environment Pollution Control course, including the use of audio visual equipment, practical exercises and study tours. The previously mentioned evaluation of the training programmes in Malaysia, showed this to be more common in that country, but as mentioned we only have one example, of how a whole training programme was recreated.

Second, there are many who conduct seminars of a day or two, where some of the issues taught in Sweden are communicated to a wider audience. Almost all of those who realised a high impact from the training were found to teach seminars, and also many who showed medium impact. Ms. Imelda Ostrea who took part in the Total Quality Management programme recounts her activities to share the training as follows:

"I planted the seed for the Philippine Women's University to consider offering two new but inter-related programs, namely Total Quality Management and the ISO 9000 Quality Management System. ... We were able to sign a memorandum of agreement with the Bureau of Product Standards for the latter to recognise the PWU as its partner in disseminating information and developing the awareness on the ISO 9000 among companies in various industries. ... We were able to hold 5 sessions with no less than 10 participants in each. The syllabus was classified into 3 types of clientele: for top management, for the middle management or supervisors, and for the rank and file." We also offered a seminar on total quality management module tailored to the nature needs of the organisation..."

It is difficult to know how many that get access to some of the contents of the training program, but according to our notes there are some 35 who have developed seminars such as this. Ms. Ostrea reached no less than 50 others. Others have reached more, and some fewer, but in total we estimate that those 35 may have reached and average of some 20 to 30 others, thus disseminating information to a total of some 900 people.

Yet a shorter form of spread effect is to conduct lectures of a few hours or half a day. About equally many share their training experience in this way, but the difference is that some reach much larger audiences. We quote from the essay of Mr. Renato Santos:

"... Since that time I started to echo the learning and experience I got from Sweden through speaking engagement or as a resource speaker in many seminars conducted by national institutions such as the University of the Philippines, Maintenance Association of the Philippines, PDC-Development Academy of the Philippines, and Metal Industry Research and Development Centre. Also at present many big local companies are utilising my experiences in maintenance management through in-house seminars. Thousands of maintenance engineers have attended this training and everybody is applying the technology in their respective company. The seminars are going on throughout the year in these institutions .."

As with the seminars, the audiences of occasional lectures vary, and while some can repeat a certain lecture in many different fora and for wide audiences, others may only reach a smaller audience. The range is from several thousand to a group of 20. Our interviews and essays inform us that a handful of persons can name their audiences in the range of 500 and more. There are about equally many who reach audiences of some few hundred. The majority of those who conduct some form of isolated lecture have audiences of 20 to 50 persons.

It is of course not certain that those who attend the seminars will learn much, or apply what they learnt. To assert whether that happens or not is another study, similar to this but evaluating these workshops, lectures and seminars, rather that the international training programmes. Whether the audiences undertake any change or not should be seen as an indirect effect, whereas the direct effect - as defined in this evaluation - is that the information is shared.

Whereas the above three examples show how information is shared through organised and formal training occasions, there is yet another way of disseminating information. On-the-job sharing of knowledge is common. Most people work on teams, where any news in job behaviour rapidly spreads to others. In particular, places where many have been for training in Sweden make use of this to consolidate the organisational impact of the training. The Bureau of Product Standards is a prime example. The interview protocols indicate that the individual impact of training was hard to grasp, but the organisation as a whole has benefited much from the exposure. Sharing of knowledge was well developed and there were adequate procedures to make sure that those who had been to Sweden gave talks, shared manuals and handbooks, or spread their knowledge by force of a good example.

In the table below we summarise the spread effects; that is, how many others that have had access to some of the knowledge, skills and aptitudes that the participants developed in Sweden. We must emphasise that this is a rough indication of magnitudes only, based on the often rather sketchy information in essays and interviews. The total figure that we arrive at - of more than 14 000 who have been confronted with at least parts of the results from the training in Sweden - is rather impressive. But we must emphasise that we have no idea at all what the impact is, nor even whether it is the same persons, or new ones. Even though Mr. Santos claims that all use the ideas they got through the lectures, we think there are reasons to be far more conservative about the impact.

Table 2. Spread effects of the international training programmes.

Type of training event	Number of participants who initiated a training event	Audience in the training event  (approximate averages)	Total number of persons who have shared the knowledge gained through the programme
New training programme/course	1	75	75
Seminar/workshop of a day or two	35	25	900
Lecture, meeting of less than a day	10 10 50	1000 200 20	10 000 2 000 1 000
On-the job sharing of knowledge Total, approximately	65	3	195 14 170

#### Personal development

When we speak about impact we are mainly interested whether those who took part in the training have done anything on the job which bears a relation to what they learnt on the programme. We want to see changes in waste management, maintenance routines, work on total quality systems, advances in energy conservation, et cetera. This is our main job, and it is changes in these and similar areas that motivate Sida to finance the international training programmes.

Whether it is considered as a side benefit, or marginally irrelevant, we would still like to point at the significant effect the training programmes have had on the participants personal development. Several essays give striking illustrations of how the programmes have affected their careers pattern and their interests in general. Many had never attended any international training before, and for many it was the first time to visit a foreign country (others were well travelled, but for some 50% it was a new experience).

Which are then the main aspects of the programmes that contribute to the personal development? The first thing to mention is that the courses are international. Almost all, mention that one particularly interesting feature is that the courses draw participants from all over the world. The ensuing exchanges of experiences, thoughts and ideas are highly valued by everybody. The second observation is that the courses are conducted in Sweden. Even though the choice of location means that the cost of training is high, it also means that the opportunities to pick up ideas and thoughts outside of the curriculum are higher. Whether they are high enough to merit the extra cost is a separate issue, which should be studied in further detail. The third aspect that contributes strongly to personal development is the practical focus of the courses; study visits, extra curricular activities, and lots of group work make them unusual and memorable events.

#### 4.4 Tracing patterns of impact

The selection of persons to take part in the training programme must be done very carefully. When we consider the participants who have made good use of their training programme, and when we review those who have not done much to utilise their new

knowledge, we are quite sure that a more careful selection process would have helped sort out those in the latter category. Three factors that set the limits on what can be done after the training are particularly outstanding;

- (a) position in the home organisation people in junior positions have lower chances of implementing any fundamental changes when they return this could easily be foreseen through a more careful scrutiny of the job positions of those who go for training,
- (b) the resources of the organisation even though the organisations may save money in the end, it takes resources to effect changes. Those coming from very resource constrained organisation stand lower chances of making anything with their training - this could also be ascertained, perhaps through a site visit as part of the selection process;
- (c) personal aptitudes individual differences in drive, passion for the job, curiosity, leadership talents etc. cannot be foreseen by looking at an application form, but a personal contact usually gives a trained interviewer good information. The selection process to date seems to be mostly based on written application, with little scope for personal interaction.

When the training has an impact, the multiplier effects are considerable. Assume that those who achieve medium and high impacts from the training realise benefits of around two million pesos each - which is a realistic figure considering the analysis above. It means that the multiplier effect from the training is around 5 - a figure which is probably on the low side. If we now assume that those whose training led to low impact had no direct visible gains at all, this would mean that around 2 million was lost in terms of opportunity cost for each one of them. If instead the right candidate had been selected, the pay-off had been so much higher. Our estimate is that around 15% of those who go for training make little use of the programme, meaning that out of the 80 or more who went to Sweden this year, around 12 will not use much of what they learnt - which means an opportunity cost of some 24 million pesos. In our opinion it is worth spending some money to make sure that the right candidates are selected.

As we have reached out to interview or get essays from 78 people it is also possible to consider whether there are any patterns among those who make better use of the training programs. Naturally, we should be careful when interpreting the data, and we would only want to point at these trends as some very vague hypotheses concerning who make use of the training. Perhaps some knowledge of these trends can guide the selection process, but we do emphasise that a personal follow-up appears to be necessary.

First of all there is the question of gender. More women responded to the invitation to write an essay, hence there is a positive bias already here. 19 out of 40 (48%) female participant had a high impact from the training, whereas 13 out of 38 (34%) male participants had a high impact. But 60% of those who went for training were men, and we may thus assume that the percentage of men whose training had a low impact is larger. The difference is large enough to merit attention. There is no reason why the gender ratio should not be 50/50, and - if one wants to see verifiable impact from the training - a slight bias in favour of female participants would be logical.

The regional distribution of participants is also interesting. A glance at appendix 4 (to the draft report) shows that only 13 of the 78 persons who went for training came from outside the Metro Manila area. As some 80% of the total population live outside this region, it is obvious that the selection process is strongly biased in favour of people living in the capital region. Yet the objectives of development cooperation put a strong emphasis on regional

balance - that cooperation should benefit the South in particular. This alone is a good reason to try and reach applicants in the regions.

But 7 out of these 13 made very good use of the training and only one from a region made little use of it (had a low impact). We cannot really explain why, but it seems as if our essay writers and interviewees in the regions were closer to the "scene of action", were more likely to get their hands dirty in implementing changes. They were perhaps more likely to return to line positions, where they had immediate use of their skills and knowledge, and hence generally recorded higher impact.

People employed by the public sector stand a better chance of being selected for training, among the 78 covered by our evaluation 38% came from the private sector and 62% from the public sphere. But are there differences in impact? Do the private firms and NGOs make better use of trained people? Less red tape, a more dynamic leadership, could mean that the effects from the training are higher? Looking only at the percentage of high impacts in each sector, 43% show high impact in the private sector and 38% show high impact in the public sector. It is a difference, although not terribly large.

The selection of topics in the international training programmes may suggest that there will be more candidates from the public sector. Many of the application opportunities are typical public sector responsibilities, such as waste management, land surveying et cetera. But in other fields, it would seem natural to ensure a proper balance between private and public sector applicants - not least because of the somewhat higher probability that the training will be put to use.

Needless to say, these findings should be treated with care, and they are certainly more like hypotheses than established facts. However, the main message is that at present the selection of candidates seems to imply a negative bias against female applicants, people from the regions and the private sector. On the other hand, the impact data suggest that these groups generally make better use of the training. Both from the point of view of justice as well as from consideration of effectiveness, there are good reasons to redress the balance and to make sure that a representative selection of candidates are sent for training.

#### **Chapter 5. Recommendations**

The international training programmes have been shown to generate substantial benefits to those who take part and to the organisations they come from. The benefits are really large, and can be counted in multiples of the cost of the training. But there is a minority of around 15% who has only limited use of the exposure to new technology, visions and ideas. There is a rather high opportunity cost to these; where the right candidate had implemented changes of considerable economic values, the wrong candidates do little that can motivate the cost of the programme.

# Recommendation number 1. Strengthen the selection process to make sure that no candidates are accepted who will not be in a position to use the training programmes.

Many things can be done to improve the selection process. The first is to widen the recruitment base. There must be a sufficient number of qualified candidates to choose from. A larger number of organisations must be invited to submit candidates so there is a wider choice of competent participants.

The screening process must be improved to make sure that those who take part command foreign languages - there are still some who slip through with marginal knowledge of English. The present English tests do not discriminate well enough. Looking at the applications, it is possible to distinguish two groups, those where it is obvious that the candidates have enough experience of English, and those where it is doubtful. The latter group must be interviewed, either by the Embassy or by the Philippine authorities.

It is necessary to assure that the candidates have a position in their organisation that gives them responsibilities to act when they return. Regrettably - but realistically - it is prudent to make sure that the candidates do not come from an organisation which is so impoverished that it cannot make any investments or follow-up to what was learnt during the training. Again, where there are reasons to be hesitant, a site visit should be undertaken.

It is also advisable to act on the knowledge of the profiles of those who make good use of the training; thus more people from the regions; more candidates from municipalities, NGOs and the private sector; fewer from central government institutions; and it is also desirable to have more female candidates.

We are aware that our suggestions imply a more expensive administrative procedure around the selection of candidates. If worst comes to worst, it is better to implement fewer courses with a higher quality, than many where the loss of impact is high. Money spent to make sure the training has an impact is money well spent.

The embassy as well as the Philippine authorities could make more consistent use of previous participants to get candidates for the programmes. Many of them would be in a

good position to judge the presence or absence of the necessary qualities to take part, and would also be good judges of the personal qualities that are desirable.

# # Recommendation number 2. The courses should be more geared to strengthen the impact when the participants return home.

Most of the courses still do relatively little to prepare the participants for their role as change agents. The course contents should be accommodated to include different ways of planning for what happens after the training, and Sida could encourage various ways to follow-up the training; for example through refresher courses, network building, regional workshops, etc.

The technical programmes should incorporate more managerial subjects relating to how to go about affecting organisational change. In a course of some 20 days, we would recommend that at least one day is spent on discussing how one convinces superiors and colleagues, and how to enlist support from subordinates.

From the first day, the participants could be reminded that they are expected to use the training when they go back. Various exercises could be used, making a note everyday on whether something useful was encountered, making a plan on how to implement these changes. Discussing these plans with others, organising networks to follow up, et cetera.

The course organisers should keep the network of participants alive, they should use media to keep in touch with the participants, and in particular to support change ion their organisations. One particular aspect of use relates to new seminars, workshops and lectures. The courses should emphasis this too, and perhaps supply the participants with outlines of two day seminars, or 2 hour lectures, with overhead slides et cetera.

# # Recommendation number 3. Keeping the local network of training participants together.

The 600 persons who have so far taken part in the international training programmes (added by some 80 more every year) constitute a valuable network - for contacts with each other, for use in getting new candidates for future training programmes, and for further contacts with Sweden - whether for commercial purposes or as expressions of good-will between our countries. Whereas it must of course be a voluntary effort to build and maintain such a network, the Swedish Embassy in Manila could play an instrumental role in encouraging and supporting such efforts.

#### # Recommendation number 4. Developing the evaluation tools.

The present evaluation was a first of its kind, focusing on the application level and the organisational level, and concentrating on one country. We would think that the most important contribution lies in the rich descriptions of impact that we got from the essay competition, which in turn has implications for how performance measurements can be designed.

The lesson is that there is not really any meaningful performance measure. The interesting information lies in the rich contextual description of the multitude of small and big things that happen after the training. Such descriptions can help us arrive at estimates of high or

low impact, but such estimates are always subjective. The interesting information lies in the actual facts of which impact is achieved and how. We recommend that future evaluations continue to develop such insights.

In practice, this means that survey instruments are less useful. Interviews of different kinds can help gather good information, but we would think that new evaluation tools need to be developed, such as the present essay competition and others that are still to be conceived. The essay competition gave us information of a far better quality than did our interviews, and at a lower cost. But interviews are necessary as a supplement to rectify the positive bias of the essay selection process.

The review of evaluations show that there are some persistent problems that have not been rectified. It may not be necessary to conduct that many evaluations until there are reasons to believe that these problems have been solved, and then use the evaluation instrument to check whether that is true.

Future evaluations should also be geared to providing decision support, in particular in respect of important decisions on the length of programmes, mixture of participants, various types of follow up, et cetera cetera. The course programme is large enough to open up for quasi-experimental approaches to evaluation, which should lend high credibility to their findings.

# Annex 1. Terms of reference



#### **UPPDRAGSBESKRIVNING**

1998-07-06

A Siwertz/INEC/IKTS

1998-036

Två utvärderingar av internationella kurser med filippinskt deltagande

# Bakgrund

Under 1998 har enheten för Internationella Kurser och Kontraktsfinansierat Samarbete diskuterat nya inriktningar för kursverksamheten som komplement till kärnverksamheten med kursverksamhet i Sverige.

Särskilt har diskuterats möjligheter att i större utsträckning än tidigare arrangera regionala eller lokala kurser, dvs att skräddarsy en eller flera kurser för en region eller ett specifikt land och förlägga kursen där.

Parallellt med utbudet av kurser bedrivs också en löpande utvärderingsverksamhet.

I syfte att erhålla en indikation om kommande samarbete med landet har beslutats att göra två utvärderingar som rör kursverksamheten med filippinskt deltagande exklusivt.

#### Inriktning

Utvärderingarna ska fokusera på två huvudfrågor:

- 1) hur deltagarna har kunnat agera som förändringsagenter
- 2) vad har kurserna givit för effekter för den enskilde deltagaren och företaget/organisationen som vederbörande representerar.

#### Metod och omfattning

Utvärderingarna genomförs enligt två olika metoder:

1) Essätävling

Kurser genomförda inom samtliga områden sedan 1993 har valts ut för denna utvärdering. I brevform uppmanas fd kursdeltagare att i essäform beskriva sin roll som förändringsagent. Pris delas ut till de tre bästa svaren.

# 2) Intervjuer

Fyra kurser inom områdena "Energi", fem kurser inom branschen "Environment" samt tre kurser inom "Industry" har valts ut. Tidsperioden gäller från de tidigaste kurserna till dags dato. Ca 120 deltagare ska kontaktas. Medelst intervjuer efterfrågas resultat och effekter av kurserna.

# Rapportering

I essätävlingen kommer efter genomgång av inkomna essäer ett första, andra och tredje pris att utlysas. Priserna kommer att utdelas i samband med en officiell mottagning på svenska ambassaden under vecka 40.

Resultaten från de två utvärderingarna sammanställs i en rapport som presenteras i måndsskiftet september/oktober.

# **Tidplan**

Essätävlingen ska genomföras under juli/augusti och avslutas med att tre vinnare ska vara utvalda till första veckan i oktober.

Intervjuutvärderingen påbörjas under augusti och slutförs i september.

Tre - fyra veckor per utvärdering beräknas i tidsåtgång.

**Sida Evaluation Data Worksheet** (for specifications of terminology see endnotes, page 3)

# A. General Information

					Contribution identity <sup>1</sup>
Report title				· · · · · · · · · · · · · · · · · · ·	Reference number (diarienr) <sup>2</sup>
Authors		Professional ba	-		ing firm/Institution
Kim Forss		Ph.D. Busi		Anda	inte
		Administr	ation		
Lars Bjern	*	Engineer		Anda	inte
Benjamin Mila	ino	Social scie	Social scientist		inte
Sida department and INEC	division responsible fo	r evaluation			
Other organizations re	esponsible/funding the	evaluation			
Total cost	of evaluation	Date of terms of reference	Date of final evaluation		project/programme been d earlier?
Sida's share, SEK	Total, SEK	- <b>(</b>	[	Yes	year(s)
380.000	380.000	7/98	12/98	No	

# B. The Project/Programme

		gramme evaluated								
				es in	the Philippin	es				
	r of project	1970s	Time perio evaluated:		1988 - 1998					
	Total cost of	project, MSEK	Cost for p	eriod	evaluated, MSEK	Sida's sl	nare, <sup>c</sup>	%:	Total %:	· · · · · · · · · · · · · · · · · · ·
Sida'	s share:	Total:	Sida's share	:	Total:	grants	cre	dits	grants	credits
809	%	60.000 per	80%		60.000 times					
		person			some 600		- 1			
		being			persons					
		trained								
Channel		Тур	e of s	support <sup>3</sup>		Cou	untry/F	Region <sup>4</sup>		
x	Bilateral		x	Proj	ject support					
	Multilatera	ıl/multibi		Sec	tor support					
Non Governmental Org.		x	Pro	gramme aid						
Sector <sup>5</sup>		Please spec	ify ac	cording to note 4 on	page 3:	Co	unterp	art <sup>6</sup>		
x	Social sec	etor					x	Publi	c sector	
X Infrastructure						_ x	Priva	te sector		
x Economic sectors						_ x	Rese	arch institut	tion	
x Public administration						_ x	NGO			
x Disaster relief			<del></del>			— <sub>x</sub>	Mixe	d		
							—			

# C. Type and Timing of the Evaluation

Tim	ning <sup>7</sup>	Type <sup>8</sup> of evaluation (one alternative)		
	Mid-term	Project evaluation		Programme aid evaluation
	End of project, completion	Programme evaluation		Thematic evaluation
	Ex-port	Sector evaluation		Organizational evaluation
x	Not applicable	Country evaluation	X	Other

# D. The Evaluation Team

	Yes	No
Were Sida personnel included in the team?		x
Was somebody from the recipient country/region included in the team?	x	
Did the team consist of person with specific sector competence?	x	
Total number of evaluation team members/thereof women	3	/ 0
Total number of man weeks used for the evaluation/thereof field work	8	/ 5

E. The Evaluation Report

Report language	English		
	Yes	No	
Executive summary included	x		
Terms of reference annexed	x		
Recommendations to be pursued by donor included	x		
Recommendations to be pursued by recipient included	x		
Lessons learned included		x	

# F. Other Issues Addressed in the Evaluation

	Yes	No
Sustainability issues	x	
Cost-effectiveness issues	x	
Gender equality aspects	x	
Environmental aspects	x	
Democracy and Human Rights aspects		x
Poverty aspects		x

# G. Evaluation Abstract

(to be attached)

The abstract shall be written by the Evaluator/team leader, be maximized to 200 words and cover Subject Description, Evaluation Description and Major Findings

The Philippines has participated actively in the Sida sponsored international training programmes. More than 600 persons have taken part in one or more of the 60 different programmes, at a total cost of 45 million SEK. One third of the participants were female. There has been a concentration of participants in the fields of environmental management, energy and industry. Many participants came from private firms, but the majority were based in the public sector.

Sida has commissioned the present evaluation to learn more about the impact of the training programmes. The evaluation was undertaken in August and September 1998. It is based on interviews with a judgmental sample of 65 persons, as well as on 28 essays about training impact and organisational change, written by former participants.

It was found that 45% of the participants make very good use of the training programme, and that the exposure has lead to a high impact on their job behaviour and on the organisations they work for. Another 36% were found to make rather good use of the training, but the impact was distinctly lower than the above mentioned group. Still, there was no doubt that moderate multiplier effects were realised from the training, and the costs could be fully justified. That means that a total of 81% of the participants made good use of the training experience, which must be considered a very satisfactory result.

It is important that the technology transfer realised through the training does not stay with one person. Indeed, most of participants are actively engaged in disseminating knowledge to others. Some have reached out to audiences of several thousand people, but most naturally reach smaller audiences. The international training programmes have been shown to generate substantial benefits to those who take part and to the organisations they come from. But there is still a minority who has only limited use of the exposure to new technology, visions and ideas. There are two ways to reduce that percentage. First, the selection process must be improved, and second, the training programmes must prepare the participants for their role as change agents.

The effectiveness of international training programmes - an evaluation of impact in one country, the Philippines.

#### Background

The present evaluation continues the analysis initiated in the evaluation of two particular training programmes, but here the scope is extended to cover several courses, while looking at their impact in only one country. The Philippines has participated actively in the Sida sponsored international training programmes. More than 600 persons have taken part in one or more of the 60 different programmes, at a total cost of 45 million SEK. One third of the participants were female. There has been a concentration of participants in the fields of environmental management, energy and industry. Many participants came from private firms, but the majority were based in the public sector.

#### The evaluation

The evaluation focuses on a description of what actually happens when participants in the courses return to their ordinary, daily working environment. What do they do, how do they apply what they learnt, and what type of effects does this give rise to? Are there any visible benefits that can be estimated in monetary terms?

Though there is a population of some 600 participants to turn to, Sida decided to emphasise the fields of environment, industry and energy (where the majority of participants were). In the last few years, around 100 people took part in courses in these fields. All of them were invited to take part in an essay competition which was designed to solicit in depth information on what happens at work, and how people behave as change agents, which obstacles they face, and how these are overcome. 28 persons responded, and their reports form the basic raw material of the evaluation. The essays are mostly well composed and concrete descriptions of impact, and they provide a very rich source of empirical data.

There is obviously a positive bias to the essays, as it is those who have a story to tell who bother to write. The essay does not tell whether there are any who make limited use of the training. The evaluation team interviewed a total of 65 persons, chosen from the same list of around a hundred. This gave some information on the extent of use, and it also gave an opportunity to verify the information in the essays.

The evaluation report, entitled "An evaluation of the impact of Sida financed international training programmes - A case study of the Philippines was written by Andante - tools for thinking AB. Kim Forss, Lars Bjern and Benjamin Milano conducted the interviews and wrote the report. The evaluation process was also closely followed by the Swedish Embassy in Manila, which provided assistance with the management of the essay competition. Annika Siewerts from Sida/INEC joined the Andante consultants for part of the field work.

# **Findings**

The evaluation distinguishes between "high", "medium" and "low" impact from the training programme. It was found that 41% of the participants make very good use of the training programme, and that the exposure has lead to a high impact on their job behaviour and on the organisations they work for. To the extent that this impact can be quantified, it is estimated to have yielded benefits of at least ten times the cost of the training. Another 44% were found to make rather good use of the training, but the impact was distinctly lower than the above mentioned group. Still, there was no doubt that moderate multiplier effects were realised from the training, and the costs could be fully justified. That means that a total of 85% of the participants made good use of the training experience, which must be considered a very satisfactory result.

Nevertheless, 15% made little use of the training programme, either because they did not learn much, or because they found no opportunity to apply their knowledge. This does not prevent that they benefited from the training personally, but it has had limited impact on their work. Even though 15% is a rather small figure, it is still a considerable expense, and there is no reason not to reduce that figure to nil. (If we can generalise to the total population of 600 who took part in the programmes, it would suggest that 120 persons, at a total cost of 9 million SEK, have made little use of the training). The knowledge of underlying factors that make for an effective and successful transfer of technology through the training programmes are well-known.

The evaluation shows that impact can take many forms, and that there is no one participant who applies new knowledge in the same way as any other. However, the evaluation distinguishes different types of change that occur as a result of the training.

A really significant impact is when the participants come back from the training with models of institutional change, such as changing government policy which is reflected in legislation. One participant influenced legislation on logging and the use of timber clearing allotments; another influenced the Act on environmentally hazardous substances. The Government's list of toxic chemicals is based on Swedish models which were presented in a programme on hazardous waste management. A relatively small number of participants accomplished changes of this nature - 12 according to our records.

Yet another type of impact is when people change the way their organisation conducts its tasks; that is, in organisational development. The exposure during the training can provide people with new ideas on how to restructure their firms, or departments, or on how to redesign work flows and other organisational processes. Training programmes in quality management have often led the firms to reorganise maintenance functions, and to involve the labour force in continuous process improvement through a variety of changes, such as quality circles, incentive schemes, maintenance routines, internal training, etc. The evaluation also documents how a municipality reorganised to be better prepared for environmental disasters, and could evacuate and feed people effectively during recent floods.

The training programmes make people more effective in their daily job behaviour. One former participant was convinced that the approaches on land use and management learnt in Sweden helped her company formulate and win a tender for a five-year integrated land use project, which of course was an immediate and direct

gain for the company. An officer in the Cost Guards had immediate use of the knowledge gained in the course on Marine Environment Protection when he was put in charge of the clean-up operations after a bad oil spill in the Laguna de Bay.

It is important that the technology transfer realised through the training does not stay with one person. Indeed, most of participants were actively engaged in disseminating knowledge to others. One person has more or less designed a similar course which he is now teaching. Many hold seminars for two or more days where key areas of the training in Sweden is used. Some of the former participants reach out to several hundred others in this way. Then there are also those who conduct shorter lectures, maybe for a few hours. Again, some have reached out to audiences of several thousand people, but most reach smaller audiences. Rough estimates indicate that some 14 000 persons have been exposed to at least a part of the programme contents by the 78 participants who gave information in the evaluation process.

Participation in the training programmes also leads to personal development, not least through increased international exposure. A vast majority keep in contact with participants from other countries, both for professional and personal reasons. For many, the opportunity for training has had immediate effects on promotion, and in some cases has also encouraged or facilitated career changes.

The evaluation has a sufficient number of data sources to be able to identify patterns of more effective utilisation of the training programmes. Even though more than 50% of the participants came from the Metro Manila area, it seems as though those who came from smaller cities, or provincial areas generally made better use of the training programme. Perhaps it is easier to realise changes in a less hectic and turbulent environment than Metro Manila. There is also a small, but marked tendency that female participants realise higher impacts than do men. Similarly, there is a tendency that private firms implement more changes in job behaviour and organisation. However, public sector participants are the only ones to effect legislation, and they also tend to generate more spread effects through lectures and seminars.

The international training programmes have been shown to generate substantial benefits to those who take part and to the organisations they come from. The benefits are really large, and can be counted in multiples of the cost of the training. But there is a minority of around 15% who has only limited use of the exposure to new technology, visions and ideas. There is a rather high opportunity cost to these; where the right candidate had implemented changes of considerable economic values, the wrong candidates do little that can motivate the cost of the programme.

#### Recommendations

First, the selection process must be improved. A larger number of organisations must be invited to submit candidates so there is a wider choice of competent participants. The screening process must be improved to make sure that those who take part command foreign languages - there are still some who slip through with marginal knowledge of English. It is necessary to assure that the candidates have a position in their organisation that gives them responsibilities to act when they return. Regrettably - but realistically - it is prudent to make sure that the candidates do not

come from an organisation which is so impoverished that it cannot make any investments or follow-up to what was learnt during the training. It is also advisable to act on the knowledge of the profiles of those who make good use of the training; thus more people from the regions; more candidates from municipalities, NGOs and the private sector; fewer from central government institutions; and it is also desirable to have more female participants.

Second, most of the training programmes still do relatively little to prepare the participants for their role as change agents. The course contents should be accommodated to include various ways of planning for what happens after the training, and Sida could encourage various ways to follow-up the training; for example through refresher courses, network building, regional workshops, etc.

Third, the 600 persons who have so far taken part in the international training programmes (added by some 50 more every year) constitute a valuable network - for contacts with each other, for use in getting new candidates for future training programmes, and for further contacts with Sweden - whether for commercial purposes or as expressions of good-will between the countries. Whereas it must of course be a voluntary effort to build and maintain such a network, the Swedish Embassy in Manila could play an instrumental role in encouraging and supporting such efforts.

The present evaluation was a first of its kind, focusing on the impact from this type of training and concentrating on one country. We would think that the most important contribution lies in the rich descriptions of impact that the essay competition provided, which in turn has implications for how performance measurements can be designed.

The lesson is that there is not really any meaningful performance measure. The interesting information lies in the rich contextual description of the multitude of small and big things that happen after the training. Such descriptions can help an evaluation arrive at estimates of high or low impact, but such estimates are always subjective. The interesting information lies in the actual facts of which impact is achieved and how. We recommend that future evaluations continue to develop such insights.

In practice, this means that survey instruments are less useful. Interviews of different kinds can help gather good information, but we would think that new evaluation tools need to be developed, such as the present essay competition and others that are still to be conceived. The essay competition gave information of a far better quality than did the interviews, and at a lower cost. But interviews are necessary as a supplement to rectify the positive bias of the essay selection process.

The review of evaluations show that there are some persistent problems that have not been rectified. It may not be necessary to conduct that many evaluations until there are reasons to believe that these problems have been solved. Future evaluations should also be geared to providing decision support, in particular in respect of important decisions on the length of programmes, mixture of participants, various types of follow up, et cetera cetera. The course programme is large enough to open up for quasi-experimental approaches to evaluation, which should lend high credibility to their findings.

#### Lessons learned

There are two lessons of significance. The first lesson concerns the impact of the training programmes. The realisation of impact is highly personal and context dependent. Among all the persons encountered in the evaluation, nobody used the training in the same way. Though there are general categories of impact, the actual thing must be described in its own terms in order to be understood and made meaningful. It is very difficult to compare impact created by one person to that of any other. On the one hand this lesson may seem pessimistic for those who look for easily applicable indicators of performance measurement, but on the other it is good news, as it also implies that impact can be practically analysed and described and communicated to anybody who is seriously interested in what happens as a consequence of the training programmes.

The second lesson concerns the use of evaluation tools. The essay competition proved to be a cost effective way of getting accurate and useful qualitative data. It is a method seldom used in development cooperation, but it may deserve more attention in situations where evaluations rely on qualitative data. In many contexts, it may be a good alternative, or supplement, to the more traditional (and expensive) interviews and questionnaires.

# Annex 2.

# 3 entries to the essay competition



# 7/10 Republic of the Philippines Province of Pampanga MUNICIPALITY OF GUAGUA

Tel. No. 910-865; Telefax No. (045) 912-391

# **FAX TRANSMISSION COVER SHEET**

Date	:	August 31, 1998
To/For	:	Mr. KIM FORSS 4's Embassy of Sweden, Maketi Gity
Fax. No.	:	2 - 815 - 3602
No. of pages i	include, cov	er sheet : 14
From	:	Mr. Isaias m. Panganibau, Jr.
Position/Des	ignation ::	SB Socretary / Concurrent MDAO
Subject	;	An Escay on ORGANIZATIONAL CHANGE (STORING - 1996)

P.01



# AN ESSAY ON ORGANIZATIONAL CHANGE AND THE IMPACT OF TRAINING (SIDA/RIMC - 1996)

#### Introduction:

The Municipal Government of Guagua, is a local government unit (LGU for short), operating within the national government framework, under a centralized system.

However, with the passage of the Local Government Code of 1991, local government units was able to enjoy more autonomy and attained strategic decentralized authority from national government agencies, particularly on public fiscal, organizational and personnel career development, and other areas of local governance.

This led to the Municipality to adapt comprehensive approach towards community development.

One of the focused area of the comprehensive approach is the training and career advancement of employees of the Municipal Government.

Availment of SIDA International Advance Training on Risk Management form part of the training and career advancement.

We would like to point out here, that employees are encouraged to pursue and avail advance trainings in furtherance of their management skills and capability, which could redound to the benefit of the local governance.

The SIDA International Advance Training Course, the Risk Management in Community Development (RiMC, for purposes of this discussion) has contributed to the wholistic community development strategy, particularly in areas of risk identification, assessment and analysis, environmental impact assessment, crisis management, institutional and organization changes, effective resource mobilization and strategic planning.

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# Improvement in Risk Management of the LGU: From Limited Risks Planning to Multi-Flazard Planning

After the termination of the SIDA training in November 1996, and upon return to official post, this author has undertaken the formation of a re-entry plan, which basically revises the existing disaster preparedness plan of the Municipal Government of Guagua.

In the conduct of the revision, the concepts learned in risk identification, assessment and analysis were applied. The previous disaster preparedness plan of the Municipality is only concentrated on flood and lahar threats, and little attention is given to other possible risks abound in the community. The revised plan included other possible risks such as fire and conflagration, earthquakes, human activities susceptible to stampede like festival, fluvial parade, concerts and others. It considers also violence born - out by demonstrations riots and other unforeseen occurrences which may result in disaster situations.

Having a disaster plan that caters to almost all kinds of risks, motivated other LGU's in the Region to adopt our plan as model.

#### The Model Plan Resulted in Sharing Sessions:

Because of the comprehensive model - plan, the Local Government of Guagua was invited in the series of sessions conducted by the League of Municipalities and Provinces in the Philippine Region and other Non-Government/Private Organizations involved in Disaster Management. As of this writing, we were able to accomplish five (5) sharing sessions, namely;

- Provincial Disaster Coordinating Council (Province of Pampanga)
- 2. Corporate Network for Disaster Response (CNDR, a non-government/private organization)
- 3. Regional Disaster Coordinating Council (Regional Level 3)
- 4. Conference of all Local Government Operations Officers (Pampanga LGOO's)
- 5. League of Municipalities and Provinces in the Philippines (LMPP)

(Please refer to photocopies of certifications marked as Annex A)

The sharing session involves presentation of practical experiences in disaster handling, resource mobilization and non-government/private sectors participation and the indigenous method in warning/alarm system. The participants in the aforesaid sharing sessions totaled to about 1,500 delegates.

This excluded minor sessions conducted at the barangay levels within the local government unit which consists of 31 barangays, with a total participants of about 3,876 individuals.

# Consolidation Of Efforts To Improved Local Disaster Management

The Municipal Government aside from participating in a series of sharing sessions, also conducted several trainings on disaster management, simulation (dry run) activities, and continued barangay information, organizing networking programs (a.k.a. BIONIC) and the introduction of Geographic Information System (GIS) as an administrative tool in managing disaster.

As mentioned earlier, at the barangay level we were able to conduct series of trainings for the 31 barangays of the Municipality with a combined total participants of 3,876 individuals. Please refer to attached Summary of participants and some pictures marked as Annex B.

#### Simulation/Dry Run Activities

Equipped with the learned skills in crisis management (for the author belongs to Crisis management group, RIMC-1996) particularly, in crisis handling and resource placement and mobilization, series of simulations activities were conducted in July 10, 1997 and August 1997 and lately this May 1998. (Please refer to attached pictures marked as Annex C).

In the simulation activities conducted, basic component of disaster handling were performed like, provision of media desk, on-scene commander, resource focal point, command post, etc.

# Geographic Information System (GIS) as an Administrative Tool and Component of Disaster Management program

Cognizant of the emerging trend on computer assisted analysis, the Municipal government, has embarked on a program to undertake a Geographic Information System, incorporating the strategic placement of resources, identification of bench marks, which could assist in risk identification, hazard mapping and disaster threat analysis - all combined would improve the management capability of the local government in dealing crisis and other disaster situations.

The introduction of GIS in our disaster program is a new management tool for local government units, (being the first among the LGUs, and second to Philippine Air Force, Armed Forces of the Philippines). It is our aim to integrate all data that could contribute in the effective handling of crisis situation.

It also promotes accuracy in data gathering integrated response mechanism, and precise identification of land elevation/topography which is a "sine-quo-non" in formulating exit plan and routes.

# **Effective Monitoring Work Scheme**

Risk prevention, needs monitoring scheme.

In an effort to integrate risk management in community development, a monitoring scheme is imperative, where various interplaying factors such as the environment, human activities in the community, installation and construction of infrastructure and facilities (i.e. factories, fuel/gasoline stations, piers and wharves) should be considered in formulating regulations, town planning, land use and zoning.

The SIDA/RIMC training provided input on these activities. Prior to the author's training on RIMC, the Municipality is saddled with traffic congestion, constricted business area, unabated improper waste discharge, encroachment and obstructions on waterways and sewerage system.

Given this situation, this author, upon directive of the Municipal Mayor, undertook land use review which led to the amendment of the land use plan, by specifying expansion area west outward of the existing business district and providing prohibition on high rise construction (more than 3 story building) so as not to contribute in the soil imbalance, considering that the Municipality has

only an average mean sea level of about 1.8 meters. Likewise, we were able to pass a legislation on solid waste management program of the Municipality, which basically embodied the rules and regulations on proper waste handling and disposal and prescribing penalties in case of violations of the program provisions. On the matter of encroachments and obstructions, the author being involved in the legislation was able to recommend the passage of an amendatory ordinance which practically updated the rules and regulations on encroachments and obstructions on waterways, river channels and sewerage systems and prescribing stiffer penalties in case of violations.

In all those aforesaid undertakings, the author's learned skills in the RIMC were applied particularly, on legislation, town planning and risk assessment.

# Improvement in the Program led to the Organization Development

In introducing changes and undertaking program improvements on risk management related areas, the focused was shifted on the key players of the program which merited a review of their functions vis-a-vis the changes and improvements introduced.

The result of the functions review is the reconstruction of the organization to put structural elements which specifically deals on specialized areas and finally the necessary support legislation for the institutionalization of these changes and development.

Evidently, the organization is proven effective in dealing with the works related to risk and other disaster management programs.

The efficiency of the personnel involved and the effectiveness of the organization are manifested in the various awards and recognition's received by the Municipal Government of Guagua, particularly,

- Most Outstanding Municipality for excellent performance in Community Development programs as exemplified by its various introduced innovations geared towards the improvement of the quality of life of the people in the community (awarded by Department of the Interior and Local Government); January 6, 1998.
- Best Prepared Disaster Coordinating Council, 2<sup>nd</sup> place, Philippine Region (awarded by the National Disaster Coordinating Council); July 7, 1997.

5

- LGU Category A for being adjudged as provincial winner and nominee in the Regional Search for the cleanest and greenest Local Government Unit of the Philippines and Cleanest Inland Bodies of water (awarded by the Presidential Committee on National Search for Clean and Green); December 2, 1997.
- Most Prepared MDCC (First to Third Class DCCs Cluster), 1<sup>st</sup> Place awarded by the Regional Disaster Coordinating Council), July 7, 1998.

(Please refer to attached photocopy of recognition marked as Annex D).

Society is constantly changing.

Recent events raise the issue of safety and emergency preparedness of all people in all nations of the world. Adequate response can only be provided if all individuals and institutions are aware of the possible hazards in the community and the need for mutual preparedness to cope with their consequences.

This is our task.

The future lies in our task.

ISATAS N. PANGANIBAN, JR Participant, SIDA/RIMC- 1996

About the Author

He is the former Municipal Administrator Designate of the Municipal Government of Guague and Municipal Disaster Action Officer. Before the May 1998 National and Local Elections, he was appointed Secretary to the Sangguniang Bayan (the legislative council) of the Municipal Government of Guague, Pampanga, and new, still currently hardling the position of Municipal Disaster Action Officer.

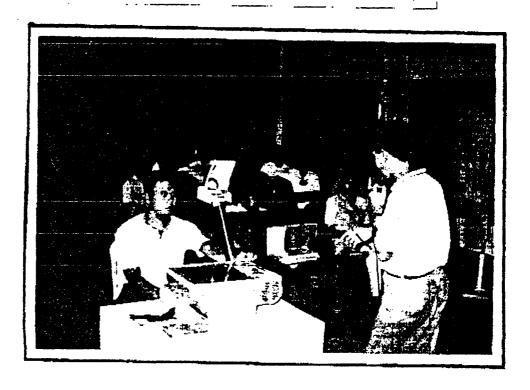
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Barangay Information, Organizing and Networking Program (a.k.a. BIONIC)





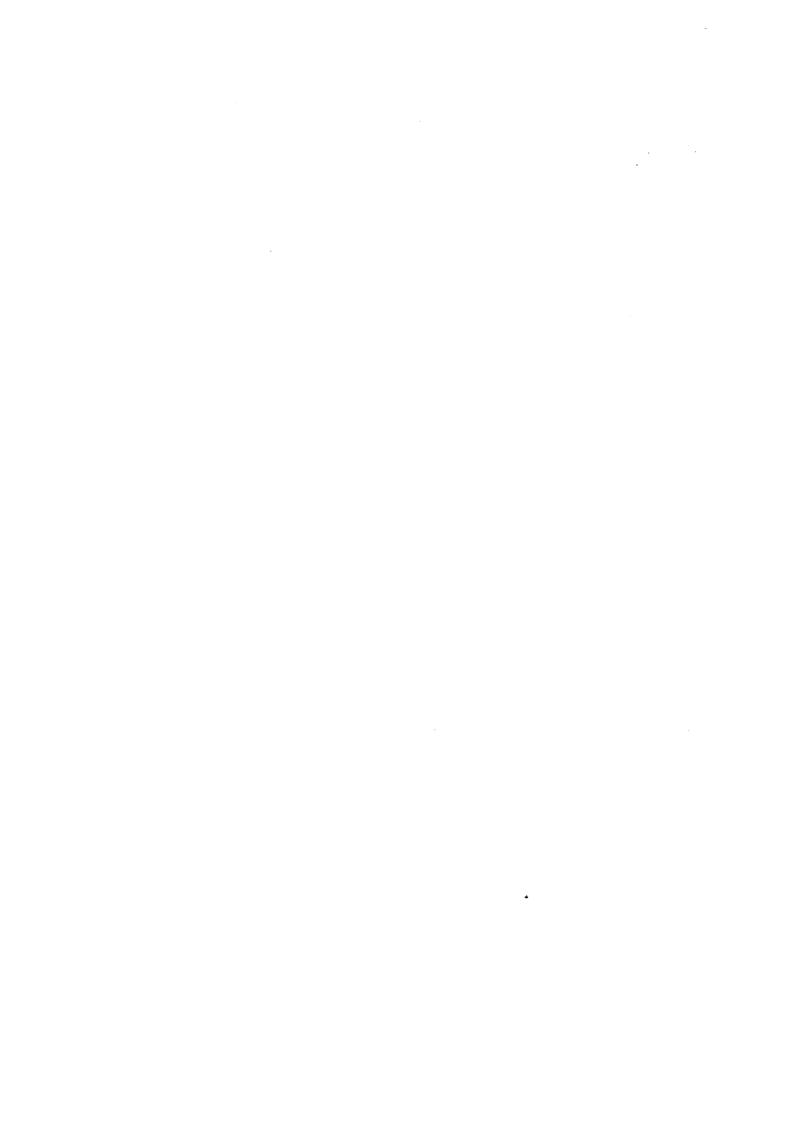
# MUNICIPAL DISASTER COORDINATING COUNCIL

# **BIONIC DISASTER PREPAREDNESS INFORMATION DRIVE** (BIONIC)

DATE	Barangay Covered	No. of Residents attended
20-May-97	San Juan Bautista	209
21-May-97	San Nicolas 2nd	214
22-May-97	San Miguel	158
23-May-97	Sta. Ines	264
24-May-97	Sta. Ursula	343
24-May-97	San Juan 1st	128
25-May-97	San Agustin	174
28-May-97	San Juan Nepomuceno	153
28-May-97	San Roque	284
<b>29-M</b> ay-97	San Nicolas 1st	147
<b>3</b> 0-May-97	Bancal	211
30-May-97	San Rafael	157
31-May-97	Sto Cristo	146
31-May-97	Sto Nino	147
1-Jun-97	Sta. Filomena	83
1-Jun-97	San Pedro	134 ·
1-Jun-97	San Matias	170
2-Jun-97	San Rafael	63
2-Jun-97	San Pedro	101
	TOTAL =====	3286

12-Jul-98	San Juan Bautista	41
13-Jul-98	San Nicolas 2nd	74
18-Jul-98	San Juan Nepomuceno	80
19-Jul-98	San Agustin	44
20-Jul-98	Sta. Ursula	75
25-Jul-98	Sta. Ines	78
27 <b>-J</b> ul-98	San Miguel	91
1-Aug-98	San Rafael	68
2-Aug-98	Bancai	39
	TOTAL =====	590

MDCC98\BIONfC.xls....021796





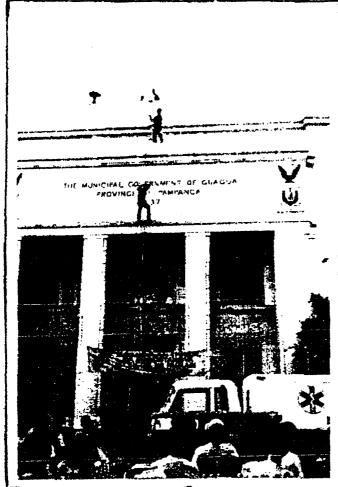


# DRY RUN

conducted on August 1, 1997

participated by: Provincial Disaster Coordinating Council Bureau of Fire Protection, Rescue & paramedics, Office of Civil Defense, BFP, Guagua, MDCC Guagua

# ANNEX C



Ropeling Activity
conducted on
August 1, 1997
participated by MDCC Rescuers



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Regional Disaster Coordinating Council

Camp Olivas, San Fernando, Pampanga

# Is presented

# Abcc godgod, Pampanga

For being the Most Prepared MDCC (First to Third Class DCCs Cluster), 1st place

Given this 7th day of July 1998, at Camp Olivas, San Fernando, Pampanga.

Regional Director/Chairman, RDCC3 P/Sc Saft ARTURO C LOMIBAO

Attested;

Regional Director, OCD 3 Executive Officer, RDCC 3

ARMANDO N DUQUE





National Disaster Coordinating Council
Camp General Emilio Aguinaldo
Quezon City

This

FLAUUL OF RECOGNITION

is presented to

# GUAGUA DISASTER COORDINATING COUNCIL Municipality of Guagua, Pampanga

for being the

BEST PREPARED MUNICIPALITY DISASTER
COORDINATING COUNCIL

SECOND PLACE

Given this 7th day of July 1997 in Quezon City, Philippines.

SECRETARY RENATO S DE VILLA Chairman

National Disaster Coordinating Council



#### CHALLENGES OF BEING AN AGENT OF CHANGE

By Elsie I. Encarnacion

I did not apply to the training in Sweden through the normal procedure I knew: NEDA sending an invitation to our agency; our agency posting the invitation on a bulletin board; and applicants registering interest and going through the prescribed screening process. A lady from an NGO whom I have helped by providing SWM data which she needed for the training showed me the way. With filled up application forms which I received from the organizers, my boss did not have the heart to turn me down. Although the first application was an easy pass, the second part of the training was difficult when the agency was bent on sending someone else instead. I had to explain carefully that approving from the start my application for the training was a packaged deal- and that we were protected by the BITS organizers by not accepting new names. This worked, thus, I have completed my training course.

The format of the training including theoritical aspects; hands-on planning and the presentation of materials impressed upon me lasting concepts and insights that later guided me through my work. It started with a presentation of the global picture of waste management within the context of Agenda 21 and sustainable development. Then the lessons moved on to show Sweden's technology and practices. It was like showing the forest and, later, showing every tree that has comprised it. This has given me the understanding that everything else is connected, that whatever we do locally contributes to the global situation. And in this regard, Sweden's local practices demonstrate how it is responding to the call for active participation in the global goal of sustainable development in so far as solid waste management is concerned.

I was not impressed by the "high-techness" of Sweden's state-of-the-art waste-to-energy facilities. Rather, I was impressed by the diversity yet integratedness of the technologies in place supported by well directed policies and continuing research and development.

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P. 61

In Gothenburgh, waste reduction through waste segregation at source is actively promoted. Waste segregation bins are situated in commercial areas; drive-through stations; centralized facilities; and, within the vicinity of clusters of medium-rise residences. Composting is also tried not only in centralized facilities but in backyards as well. Gothenburgh has also joined a network of nearby local government units for the incineration of a portion of its generated waste. Finally, it maintains a sanitary landfill as an ultimate disposal facility.

So coming home from the training started the challenge. I was full of enthusiasm yet I had mixed feelings. I felt the urgency of doing something to prove that after all, my office, did not make a mistake in sending me away for a total of six weeks - as if I could do some kind of magic. Having gained additional insights, I came to understand better about the situation of Metro Manila, its complexities and constraints being comprised of 17 cities and municipalities and a population of some 10 million to gain its title as one of the few mega cities of the world, far greater than the total population of the whole of Sweden. I found reasons and justifications for the gaps that existed, and the issues that have long been there, just as I mentally offered strategies to solve them. Yet I know from the start that I couldn't introduce something big.

How then would one like me in such a position influence change in an organization that was re-organizing (in fact, still re-organizing)?" What lessons have I learned in Sweden, that can be applied in Metro Manila? If I strove for improvement within the sphere of the task assigned to me, then I thought that this was a good start. And by so doing, I hoped to influence my colleagues by setting the example. So, I proceeded with this kind of inner motivation and attitude. Initially, I was assigned to evaluate project proposals sent by international vendors whose technologies claimed to guarantee the solution of the 5300 tons of waste produced in Metro Manila daily. Aided by the information I got from ISWA to which participants to the training were encouraged to become members, my work has become easier and learned some more through the process. Later, my boss, trusted me to represent him in various meetings, round-table discussions and forums. Through time, I did not tire of discussing solid waste management matters with

2

Earlier, for the lack of challenge to influence change in their respective workplaces, the alumni of the first and second batches of the international training met together to plan out the establishment of the Solid Waste Association of the Philippines (SWAP), a localized version of the ISWA. Just as when all the documents were ready for official registration, some members chanced upon promising opportunities to launch their careers in consulting. So, meantime, SWAP takes the back seat awaiting revival.

The dynamics of change is indeed very intriguing and exciting. Although change is recognized as a need and may be welcome, most of the time, it is feared and resented. One classic example is the need for an institutional reform where residents share the burden in waste management by paying waste management fees that need to be implemented through local legislation. While some local executives welcome this, others stall due to the NIMTO attitude (not in my term of office). But change do not just happen. We have to do something to make them happen. That is what leaders are there for.

Then it was time to try a new thing. The homework I worked on to be presented during the second part of the training was about the recovery of household batteries. Based on my discussions with a major battery producer, I found that Metro Manila alone made use of some 50 million pieces of household batteries, 80% of which still contained the dreaded mercury. The reason for my choice had something to do with our first sanitary landfill. At that time, the inadequacies in its operations and management had created protests and only from the local residents and authorities nearby but from NGOs as well? So I thought that diverting the household batteries from the landfill would be a good promotional strategy - to show that our agency was actually doing an extra effort in protecting the environment. I presented my proposal to the Recycling Committee, composed of directors. I explained the concept on recovery the way I have seen it in Sweden where some hotels or residential areas placed bins of used household batteries near the front desks. Collection and treatment could be arranged with the producers and they may be influenced to start producing ones with "no mercury added." All these required the support of the management which the committee later on realized, could not

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colleagues. I talked with our sanitary landfill manager about the finished landfill in Lund that served as a small park with the gas vents still sticking out; about the other that grew willows to help prevent erosion, watered by recirculated/reused leachate with the hope that they will gain new ideas. I suggested the planting of trees around the sanitary landfills to soften the negative perception of the public about sanitary landfills. I facilitated a meeting of officials involved in the landfill with a consultant who assessed the operations and management of the facility with the objective of discussing the result of the evaluation from which the landfill officials may take the cue in instituting improvement. In several occassions, I also made myself available as a resource person/lecturer in forums and seminars keeping in mind the guide I learned in Sweden which is: 6-7 mm height of letters; 6-7 words per line; and, 6-7 lines per page for presentation materials to effectively convey the message.

And I think I really worked hard. For this, I got compensated with additional hard work.

I wanted to believe that my office, after all, did right by sending me to the training.

And then, my boss got me involved in the preparation of the Solid Waste Management. Master Plan for Metro Manila with the rest of the staff. This was now an application of the hands-on-training we had in Oshakati, Namibia. The only difference is, Metro. Manila is a thousand more complicated. Further, I also became the local counterpart in the conduct of landfill-gas-to energy feasibility assessment with the hope that it will be implemented like the similar facility I have seen in Lund.

When the instruction came to prepare a project proposal for a pilot composting, I thought, "why not?" Some 45% of the generated waste in Metro Manila is kitchen and garden waste. Composting just 10% to be diverted form the landfills would be good enough start considering the extreme difficulty in finding new sites within the proximity of Metro. Manila. If Gothenburgh is willing to wait for eight months before it can harvest its compost stock for its flower gardens, why can't we for three months?

be secured for the moment. So I withdrew my proposal - discussed with a friend from the private sector who later went into a similar project.

One and a half years later, I was tasked to head the research and project development group. Two of the staff assigned to me have already been involved in community based. SWM activities for about a year. To my surprise, no documents from which one could appreciate the effort was available. To be able to know about these efforts, the personnel involved would tell "their story" relying on their memory. And those were eight communities to talk about each time they were asked. What a waste of effort if through time they lost tract of their points of reference for objective evaluation. What a real waste if nobody ever learned from those activities. And so I tried to encourage them on the importance of documentation and coached them on how to do it. Some progress was made but the new priorities came along.

And then an opportunity came. Part of the preparation of the SWM Master Plan for Metro Manila was the conduct of community based pilot projects on the improvement of collection system in inaccessible areas (very low income community, depressed with narrow streets); and, community based waste reduction through waste segregation at source and recycling. Inspired by the "till vara" pilot community recycling project presented in Stockholm, I knew from the very start that it was the most opportune time to do what I most wanted to do: document properly and let it serve as a guide to any interested community organizer.

First was the pilot project on the improvement of the collection system in inaccessible areas. The latest survey showed that of the 5300 tons of waste generated per day in. Metro Manila, some 4900 tons are discharged by households of which 27% are illegally dumped in river ways, canals, drainage systems aggravating the flooding problem during the rainy season. This 27% are generally generated by residents where the streets are narrow and are inaccessible to collection trucks. After a series of ocular inspections was conducted in the identified sites, it was tempting to prescribe technical solutions in line with the availability of resources. Learning from tunsustained community projects based

on such prescriptive approach, I proposed a method that allowed the community to produce a plan that they themselves have formulated where my team would only serve as facilitators. Explaining in detail, our foreign counterpart fully supported the idea. My boss said, "no, you don't control the resources." But I was stubborn because I strongly believed that any community should plan for themselves with careful guidance and assistance. Insisting my way, my boss said, "ok, you can try it but be careful." Whatever that meant, I did not really know. Eventually, we were able to facilitate the formulation of action plan for each of the pilot sites. Not anybody else's plan but their very own. It expresses what they are willing to do to achieve their desired environmental goals. It defines what to be done by whom and how. Eight months after, the pilot projects are still on-going. There had been hitches along but these all served as opportunities to learn. Through proper documentation we were able to objectively evaluate the project. Today, we are now writing the manual to guide the local government units of Metro Manila in extending collection coverage in inaccessible areas in their municipalities or cities where the marginalized 35% of the society live.

As regard the community based recycling pilot project, the same approach has been fixed. Concentrating on a broad range of the traditional recyclable items such as paper, plastic, glass and iron/aluminum one of the two pilot sites has already started selling their collected and stored items and the other has stored enough to make its first sale.

Indeed, waste is a very interesting and a very exciting thing worth looking at. It keeps coming. It keeps challenging the technocrats, politicians and sociologists. We have to redefine the approaches within the context of available resources, socio-political considerations and sustainable development. Low cost and local technologies should be encouraged recognizing the contributions of the informal sector already in place.

At the end of the day, I think about the current solid waste management situation in Metro Manila and I realize that we should have made the decisions yesterday when the room for choices was less constrained. But we cannot dwell on yesterday's inadequacies. We have to move on, with the end in view of the many years ahead. The challenge lies

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on the 45 % kitchen/biodegradable waste that need to be diverted from the precious landfill space. The other challenge lies on the other 40% dry recyclables (paper, plastics, bottles and iron/aluminum.

I have just accepted a new challenge referring to the 40% dry recyclable wastes. Dubbed as Metrowide Waste Reduction Program: Community Based Recycling, the project would entail organizing 17 communities (one per city/municipality) to establish their own recycling program where the role of my staff is to provide on-the job training to organizers for each of the local government unit in Metro Manila.

Tough job, I know. But mobilizing the very source of waste is the challenge I would want to try. This is about a polluter's responsibility in his community. Responding positively would not only make one a good local citizen but a good citizen of the earth as well.

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## **FAX FOR TRANSMISSION**

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TO :EMBASSY OF SWEDEN

7-8/10

SUBJECT:SIDA ESSAY COMPETITION

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# "ORGANIZATIONAL CHANGE AND THE IMPACT OF TRAINING" (SIDA ESSAY WRITING CONTEST) By: LT ALLEN T TORIBIO PCG

Knowledge is Power. And the benefits that man derive from it far outweighs the sacrifices that goes with it. Thus, the training being sponsored by SIDA has a great impact for the Philippines in general and myself in particular.

The training I have got from Sweden on Coastal and Marine Environment Pollution Prevention Course (CMEPP '94) has benefited me a lot in terms of new gained knowledge which resulted to the enhancement of my professional, social, as well as economic well-being.

In terms of professional development, the training and exposure that I derived from it make me well-prepared for my new role in the Philippine Coast guard Organization. Soon as I reported from the training, I was promoted to Deputy Commander, National Operations Center For Oil Pollution (NOCOP) and concurrent Commanding Officer of First Marine Environmental Protection Office (1MEPO). Armed with the knowledge I gained from the CMEPP'94 Course, my organization. remarkably accomplished its tasks of protecting the marine environment in my area of responsibility. I am the designated Pollution and Adjudication Officer at First Coast Guard District during 1994 to 1996. As adjudication officer, I conducted administrative investigation of pollution cases and render decision-based on evidences presented during the Hearing of the case. The men under me had performed very well in monitoring and inspecting vessels and other entities contributing to marine pollution. We conduct regular monitoring of ports and harbors while randomly boarding vessels to check compliance to national and international regulations. We have responded to several oil spills and supervised its clean-up operations. We also construct improvised bamboo booms to trap floating debris along Pasig River in support of the program of government to rehabilitate the Pasig River. To summarize the accomplishments, FIRST MEPO has been adjudged best MEPO of the year for two consecutive years, 1994 and 1995 for its Par excellence in accomplishing its tasks of protecting the marine environment. That time also when I was designated as on-site Commander on the oil spill response operation at Malaya Thermal Plant at Laguna de Bay. Utilizing my gained knowledge from Sweden oil spill response strategy, I immediately organized all the response teams into one response network which the Coast Guard must lead based on the National

Oil Spill Contingency Plan. A well organized team is essential for a well coordinated and efficient response. After proper assessment of the situation, response decision was made to conduct containment and recovery at source of pollution to limit further spreading of pollutants. While shoreline clean-up was being done at the same time to affected coastal Barangays utilizing local labor and supervised by Philippine Coast Guard personnel. Arrangement were made for media liaison, health care. billeting, supplies, transportation, communications, and food provisions for all the personnel responsible in the operation. Men and equipment were mobilized to where they will be very effective and priorities for protection were made to protect the fish sanctuaries and fish cages. disposal sites as well as final disposal sites were agreed upon during regular assessment meetings, as well as what payment scheme that the Spiller (National Power Corporation ) should adopt to compensate affected families. At all phases of the operation, safety is always emphasized to prevent accidents. So far the whole operation went on smoothly without any occurrence of accidents or injury. For that operation which lasted for almost a month, I was awarded a Military Merit Medal for effectively managing the response operation and for providing expert technical advice to oil spill response teams. The award was given during the celebration of the Philippine Coast Guard Anniversary which was held on 10 October 1994 just months after my training in Sweden that culminated on May the same year. Had it not for that training, I will not be prepared to tackle that enormous task of responding and managing the whole oil spill response operation in such important body of fresh water, the Laguna de Bay. The and result is that, the Government of the Philippines was able to prevent further contamination of the lake which if not prevented will result in a catastrophic destruction of lake resources specifically the fish sanctuary and the fish cages which supplies the food requirements of Metro Manila and adjoining towns and where marginal fishermen relies on their daily subsistence.

The gained knowledge I got also opened the floodgates of opportunity for me. I have been invited to various environment training programs locally either as participants or guest resource person on marine environment protection. Thus, opening new horizon for my professional and social developments by meeting different people of various stature and expertise. I am a regular guest resource person at Coast Guard Training Center on topics relating to Marine Environment Destanting

shipping companies on marine pollution control and environment protection. In all my engagement as a resource person on said topics, I was

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given honoraria thereby contributing to my sources of income and improving my economic status. Through these activities also, I was able to impart my new gained knowledge to other sector of our society thus making them aware of the importance of environment protection and reecho them to their subordinates and peers through formal or informal instruction. In that case the training program of SIDA became sustainable because it enabled to reach the grassroots of our Society through training and re-training or re-echo. It did not stop to me who is the recipient of such training program of SIDA.

After two years stint at NOCOP and 1MEPO, I was chosen to head one of the Coast Guard Station (CGS Brook's Point) at environmentally critical area of Palawan. There, imbued with social responsibility to protect the environment. I initiated the conduct of regular patrol together with local environmentalists resulting in the apprehension of illegal loggers and fishermen using illegal means of fishing. We became active member of the Bantay Palawan, Environmentally Critical Area Network (ECAN) Board of Brook's Point as well as the Protected Area Management Board -Ursula Island Game Refuge and Sanctuary (PAMB-UIGRS) locally known as Birds' Island. These group are the one responsible in protecting those critical areas in Palawan province through their coordinative links with local governments, non-governmental organization, and local environmentalists. During my whole stint as Station Commander of CGS Brooke's Point, we were able to apprehend illegal shipment of banned pesticides endangered wildlife and marine species, banned forest products like mangroves and species of hard wood. Our effort made us prominent in the area. We gained friends as well as numbers of enemies as a result. We were able to stop the multi - million peso illegal logging operation which destroys vast tracts of mangrove swamps in my area of responsibility. This caught the ire of influential people in the area. I have filed several cases to court against a particular person caught by my group destroying the environment for profit and without any legal authority. In turn me and my men were countercharged with several cases in a different fora. However these resentment that we encountered did not deter us from pursuing our mandated functions of protecting the environment. We fought for our cases for we are only doing our job and we have acted in good faith always, and all our actions were within our authority and within the bounce of law. In the end we were exonerated of the charges against us and we proved them wrong. The consolidated effort of CGS Brook's Point under my leadership, in the performance of our duties including environment protection, earned CGS Brook's Point the much coveted. Coast Guard Station of the Year Class-C for 1996. This award made us

more triumphant against our critics who plunders the environment for vested interest.

After one and half year at CGS Brooke's Point, I was assigned at Coast Guard Training Center (CGTC) as Assistant School Director and Operations Officer. There I applied the style of training, conducted by SSPA/SIDA to our course on International Training on Coastal and Marine Environment Pollution Prevention Course Batch '94. I adopted the use of audio visual equipment in our conduct of lectures and also practical exercises as well as study tours. The students were given on the job training on response to marine oil spill particularly on the use of equipment and contingency planning. So far, the comment of the students are, they learned a lot through that new approach in training which was patterned through my training experience in Sweden. This is so, especially during the conduct of Coast Guard Station Commander's Course of which I was the course director. My short stint at the training center have made a difference on the style and quality of training that I initiated based on my training experience at Sweden.

I am posed to institutionalize the reforms I've made through my drafting of CGTC organization and regulations manual when the position of Deputy Commander, NOCOP became vacant and the Philippine Coast Guard (PCG) was looking for a qualified trained, and competent officer. There was no available officer to take the position. So, after ten months at CGTC, I was transferred to NOCOP as Deputy Commander, thus my work at CGTC for its organizational set-up has not been finished. But still, I was able to make its new table of organization and equipment that has been approved by PCG. The CGTC organization and regulations manual needs only finishing touches and I promised to Superintendent, CGTC that I will finish the job even though I am assigned already to the other units. That's the problem, when you have a project in one office then suddenly you will be reassigned to new office with greater roles and responsibilities like NOCOP.

As of this moment, I am on the process of making position papers on strengthening the National Operation Center for Oil Pollution. We are trying to regain control of the Marine Environment Protection Offices (MEPO's), the task units of NOCOP which was devolved to Coast Guard Districts without the benefit of an enabling law or regulations to effect such transfer. I expect to meet resistance from the District Commanders for this problem became a turf war. However, we have planned a strategy wherein we would invoke the question of legality on the devolution of

NOCOP task units (The MEPO's) to the District Control. In jurisprudence, it is an established fact that a law or regulation remains effective unless repealed, modified, or altered by another law or regulations. Our task units (MEPO's) was created under a Letter of Instruction in pursuance of PD 602 (National Oil Pollution Operation Center Law) and PD 600 as amended by PD 979 (Marine Pollution Laws). And these laws and regulation in a form of Letter of Instruction had not been repealed or modified. So far, we have achieved partial success with the activation of Marine Environment Command (MEPCOM) wherein under its organization, MEPO's will be under our control again. Control of task units is very important because it is one of the management tools in the accomplishment of mission. However, initiating organizational change is a tough job for there are people who simply would not listen to reason or just don't want changes.

Well everything has been said and done, and truly my training in Sweden has benefited me a lot in terms of my professional growth, social responsibility towards the environment, and economic status improvement. But all these things has a great impact to my organization for in one way or another I have made relevant accomplishments which are also the accomplishments of my organization (PCG) in support of development efforts of the Philippines. And if ever, I will be given another opportunity to train abroad, I would still prefer training in Sweden specifically at World Maritime University at Malmo, Sweden because my stay in that country had been a wholesome and intellectually fulfilling experience. Thank You!

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