PREPARATORY COMMITTEE FOR THE
INTERNATIONAL CONFERENCE ON THE
RELATIONSHIP BETWEEN DISARMAMENT
AND DEVELOPMENT
New York, 2-13 June 1986

MILITARY SPENDING AND THE DEVELOPMENT PROCESS

Contribution by Mr. Augusto Varas of the Latin-American
Faculty of Social Science (FLACSO)
INTRODUCTION

1. In its resolution 40/155 of 16 December 1975, the General Assembly approved the report of the Preparatory Committee for the International Conference on the Relationship between Disarmament and Development. 1/ Paragraphs 19 and 20 of that report requested the Secretary-General of the Conference, inter alia, to update existing materials, to prepare background papers and bibliographies and to compile information and an analysis relevant to the work of the Conference, including succinct papers on the three substantive items on the agenda. Those have already been published as information papers A/CONF.130/PC/INF.3 to 8.

2. In addition, paragraph 20 of the report stated that "the preparation of a number of other new documents and papers, on a strictly selective basis, might be necessary. In this connection, the Secretary-General of the Conference should make full use of the United Nations system and also be free to consult acknowledged expertise in the field". It should also be noted that a statement by the Secretary-General of the United Nations, contained in document A/C.5/40/52, "anticipated that approximately five research papers would be required".

3. In keeping with the above, the Secretary-General of the Conference, in consultation with the members of the Bureau, invited Mr. Augusto Vargas of the Latin-American Faculty of Social Science (FLACSO) to prepare in his personal capacity a contribution on military spending and the development process, which is reproduced herewith. The views expressed in the paper are solely those of the author.

Notes

Annex

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By Mr. Augusto Varas of the Latin-American Faculty of Social Science (FLACSO)

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/...
I. BACKGROUND

1. Economics and politics have been generally considered as employing competitive approaches to analyse the causes and consequences of military spending. Nevertheless, an interdisciplinary approach is necessary to examine the impact of military spending on the development process because the issues involved are economic as well as political. Military expenditures are not synonymous with an arms race, defence burdens or militarization, which affect the process of development differently in various parts of the world.

2. A major limitation of analyses about the impact of military spending in the developing countries has been the absence of disaggregation among various subregions and the lack of differentiation between the causes and consequences of such expenditures during different periods of time. Well-known studies on the subject mostly focus their attention on earlier periods. The Benoit study considered the 1950-1965 period. The Massachusetts Institute of Technology (MIT) project analysed the years 1952-1970. The Brozka-Wulf and Smith studies also considered data up to the mid-1970s. The Deger-Smith analysis looked at the 1965-1973 period. The Russet-Sylvan study for the Thorsson report focused on the 1960-1975 period. The Taylor report to the Palme Commission covered the period 1950-60.

3. In view of major changes in international and local conditions, it is not possible to explain the situation in the 1980s by examining the factors relevant in the earlier periods. The current international milieu is much more diversified than those of previous decades. On one hand, the fragmentation of world power - or multipolarization - has created wider margins for options available to developing countries. On the other, the dollar and oil crisis between 1973-1974 produced a deeper differentiation among various subregions. While these changes are relevant for the economies of both the developed and the developing countries, they are more crucial for the latter in view of the weak adaptation capability of some subregions as compared with others.

4. Faced with the same situation of various types of resource constraints, not all the developing countries have responded in the same manner in making adjustments to their military expenditures. After 1973-1974, for example, the OPEC [Organization of Petroleum Exporting Countries] countries could afford an expansion of their military budgets by almost 40 per cent in real terms. Those countries in the Middle East and Northern Africa which received indirect benefits from the oil boom, behaved more or less similarly. In some cases, particularly in Latin America, expansion of military budgets was associated with availability of international loans, with the result that military expenditures, the gross national product (GNP), and the rate of investment could increase simultaneously.

5. Instances like those mentioned above have sometimes led to the conclusion that "there is evidence that military expenditures can have both positive and negative effects on the economy and that it is necessary to weigh up these effects to see on which side of the scale the overall balance lies." 1/ It is difficult to make sweeping generalizations about the experience of developing countries since there are much wider variations between their economic and political situations as compared with those among the industrialized countries.

...
6. The special economic situation of the OPEC countries is generally recognized as is that of Latin America which, by and large, constitutes a separate category as a critically indebted area. In addition, the political situation varies among the different regions: the Middle East and Northern Africa have experienced continuing military conflicts; sub-Saharan Africa faces problems of nation-state building; and Asia and Oceania are "mixed" areas with some subregions facing conflicts and others pursuing pacification processes.

7. It is against this constantly changing and highly diversified politico-economic background, that the present paper examines the impact of military spending on the development process in the developing countries.

II. DIMENSIONS OF MILITARIZATION IN THE DEVELOPING COUNTRIES

8. Military spending by itself does not explain the dimensions of militarization. Militarization includes: increases in military spending; expansion of military personnel; build-ups of military infrastructure; growth of weapons imports; and the setting-up of an indigenous military industry.

9. The process of militarization in the developing countries is not homogeneous. Increases in military spending, personnel and arms imports and the build-up of military infrastructure and military industry have not followed a discernible pattern in all the subregions. A combination of the various symptoms of militarization has not necessarily resulted in similar choices for resource allocation for military purposes, as can be seen in table 1 below:
Table 1. Dimensions of militarization, 1973-1983
(Average yearly (percentage) rate of increase)

<table>
<thead>
<tr>
<th>Area</th>
<th>Military expenditures</th>
<th>GNP</th>
<th>Personnel</th>
<th>Arms Imports</th>
<th>Arms Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third World</td>
<td>5.21</td>
<td>4.84</td>
<td>2.22</td>
<td>7.36</td>
<td>18.73</td>
</tr>
<tr>
<td>Middle East and Northern Africa</td>
<td>2.62</td>
<td>6.06</td>
<td>3.39</td>
<td>2.25</td>
<td>19.54</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>5.82</td>
<td>1.76</td>
<td>6.25</td>
<td>7.27</td>
<td>-</td>
</tr>
<tr>
<td>Asia and Oceania</td>
<td>3.57</td>
<td>5.75</td>
<td>1.28</td>
<td>2.06</td>
<td>18.25</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>3.06</td>
<td>3.21</td>
<td>3.58</td>
<td>9.10</td>
<td>23.11</td>
</tr>
<tr>
<td>OPEC</td>
<td>38.39</td>
<td>6.36</td>
<td>4.00</td>
<td>14.19</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: See methodological appendix below.

10. Major trends in the symptoms of militarization among the developing countries are briefly outlined below.

A. Military personnel

11. An increase in military personnel is a commonly shared feature among several developing countries. Militarization in Third World countries - excluding NICs [Newly Industrialized Countries] and OPEC - is related to these increases. This is due to several factors. Among others, there are political reasons related to the use of coercion to maintain order in these societies particularly in the initial process of nation-state building.

12. The subregions of Latin America and the Middle East show a saturation of military institutions - in the former, due to the political function of the military and in the latter, due to the long-standing conflict situation there. Accordingly, their rates of increase are moderate but their military institutions...
are fully staffed. In Latin America, increases in military personnel are on the decline, owing to the democratization trend. In the Middle East, such a decline may accompany peaceful settlement of the ongoing conflicts and conflict situations.

13. The rate of personnel increases in Africa is higher considering that its starting ratio was comparatively lower than that of other subregions. Another explanation of this situation is related to the process of national construction and the role that the state-building process plays in it. Irredentism, revanchism, inter-ethnic conflicts, secessionism and anti-colonialism as the main sources of conflict in African countries created sufficient conditions for expanding those state apparatuses which could build the new African nation-States. 2/ Considering that the development of the African States only started two decades ago, the military/population ratio increased more rapidly than in other regions. On the other hand, Asia and Oceania have long-standing military establishments, and their current trend is towards greater emphasis on weapons production and stocks rather than on personnel.

14. The case of OPEC shows a mixed situation. Its military/population ratio is not high and its rate of increase is moderate. Reliance upon weapons imports rather than personnel was until recently the trend, which could come under pressure as a result of financial shortages because of the latest oil price decreases.

B. Arms imports

15. The increasing need for industrialized countries to export weaponry to developing countries has, in some cases, been a crucial element of their economic growth. Together with politico-military considerations, plain economic reasons have been the main stimulus for this process.

16. A structural integration of an international military-technocratic elite around transnational weapons producers was observed in underdeveloped countries feedbacking the autonomization of the military in developing countries. New technologies transferred to the developing countries tend to change military doctrines, intelligence capabilities and operating conditions, and thereby have a destabilizing effect on local and regional security.

17. Arms imports also distort the trade profile, inhibit the import of capital goods, create financial problems, are unproductive and cause maldirection of the productive structure. 3/ The Middle East, Northern Africa, Latin America and the Caribbean areas show the highest rates of increase in weapons imports, and part of the explanation lies in their continuous exposure to unresolved situations of military conflict and political tensions.

C. Military industries

18. A more recent dimension of militarization in some developing countries, has been the growth of local arms industries. Integration into the international military-technocratic elite, assertive nationalism, the expectation of a
technological "spin-off" or protection against embargoes have been viewed as the major factors explaining the process of an indigenous military industry build-up. Although the reasons why a local arms industry is developed could be diverse, a recent comparative study states that "the predominant rationale is a political one". 4/

19. Nevertheless, this perspective is challenged by those who believe that:

"economic and technological variables play a significant role in explaining the continued expansion of arms production, purchases and sales. Strategic-political factors, while important, are insufficient to explain this upward movement. Public welfare and corporate personal profits are also driving military-industrial complexes forward." 5/

Foreign exchange shortages have also been identified as an additional driving force for the establishment of such industries by the developing countries. 6/

20. In some cases of military production, the developing countries are specializing in weapons systems different from those produced in the industrialized countries and are catering more to the demand for military hardware suited to the requirements of meeting situations of internal unrest. In others, there is an attempt to produce hardware originally developed in the industrialized world.

21. In the developed world, competitive militarization is already known to consume from 5 to 10 per cent of global energy and mineral resources, and military research and development account for more financial and intellectual resources than are devoted to research and development on health, food, production, energy and environmental protection combined. In some cases, concentration on military technologies at the expense of civilian-oriented research and development is known to have contributed to the relative decline of the performance of commercial goods in world markets. If these are the results for developed economies, distortions in developing ones could be much more acute and serious.

22. In trying to explain the causes of militarization in the developing countries, much has been said about the role of the military. In identifying the military as a dominant factor in blockading development, it has sometimes been suggested that "Third World militaries must leave the political arena." 7/ Such single cause explanations, however, cannot provide either the diagnosis or the remedies for the problems of development in the developing countries.

23. Military Governments are sometimes seen as favouring high levels of military expenditures because of their autonomous role *vis-à-vis* the State and society and because they could define their own institutional ends and means. Exclusion of the military from the political arena is not, in itself, however, a sufficient condition to cause a decrease in military spending and militarization.
III. IMPACT OF MILITARY SPENDING ON THE DEVELOPMENT PROCESS

24. Empirical analyses continue to argue about the positive and negative effects of military expenditures on both the industrialized and the developing countries. Benoit's traditional argument stated that "a substantial part of defense expenditures in the United States of America (and in other industrial countries), goes to support research and development. The indirect stimulus to the civilian economy is often profound. Substantial numbers of people are linked, many in an indirect way, to the defense program in transportation, trade, and services." Emphasizing the argument further, it was even suggested that "there is a probability of a stock-market break in the event of disarmament." 8/ The same kind of argument was made regarding third world countries, since "the average 1950-1965 defense burdens [defense as a percentage of the national product] of 44 developing countries were positively, not inversely, correlated with their own growth rates over comparable time periods. There was less than one chance in a thousand that it might have occurred by accident." 9/

25. Such arguments have reappeared whenever the question was raised as to why some countries spent more than others in military areas. Although the differences between developed and developing countries are accepted, the projected effects are considered to be the same. Accordingly, it continues to be argued that "the richer the nation the more resources it devotes to defense. The slight - weaker LDC [less developed countries] relationship is also consistent." 10/ Nevertheless, in all these arguments, differences among developed and developing countries have either been disregarded or given insufficient attention by equating different subregions and considering the problems of development and growth in those areas as similar.

26. On the other hand, several arguments have been examined to demonstrate that military expenditures have affected development in industrialized countries. Among those arguments is the role of the military in political decisions and that of political decisions in resolving economic problems. The negative effects of military spending on economic performance are seen as: high rates of unemployment, lower investment, lower growth, inflation, obstacles to achieve a healthier and better educated citizenry, negative effects on personal consumption, reduction of exports and higher imports, low GNP increases and productivity and decreasing governmental civilian expenditures.

27. All the United Nations reports on the subject have stressed the negative consequences of military expenditures on economic growth both for developed and developing countries. 11/ The Palme report stressed that higher military expenditures in industrialized countries had a negative impact on the offer of civilian qualified jobs, with inflationary effects and serious negative opportunity costs. For developing countries, the Palme report stressed the negative impact on health and education, foreign exchange shortages, reallocation of qualified personnel to the military, decreasing GNP and increasing food dependency, and it doubted the positive effect such expenditures might have on employment and global demand. 12/

28. In recent years a set of new researchers have questioned the existence of demonstrable evidence of the negative socio-economic effects of military expenditures. The rationale of this position is to recognize that military
expenditures in the last decade have had a positive impact on a given type of growth. Accordingly, it is argued that "Military spending can create economic problems. But it is not the primary source of our economic problems, nor is its impact as negative as this argument would make it seem. ... Defense spending helps a certain kind of economy develop." 13/

29. As explained earlier in this paper, military expenditures and their allocation for military-industrial production could result in a kind of socio-economic development in which militarization could represent a supporting force for that type of growth in industrialized countries, and also in some developing ones.

30. Nevertheless, the impact of military expenditures on growth in developing countries is different from that in developed ones for obvious reasons. More than affecting growth, military spending in the developing countries has a negative impact on welfare. It is important to emphasize the difference between growth and development in the developing areas. Growth as GNP increases does not represent development considered as improving the standard of living of the whole population. In developing countries, growth and development are different, owing to their regressive distribution of income: concentration and centralization of the benefits of growth in a few hands continues to be a trend. Even at the international level, the global economy is concentrating and centralizing growth among the industrialized countries.

31. Growth in developed countries has already created a stable welfare "cushion". In developing countries, however, there is a "zero-sum" relation between welfare and warfare. Any change in this relationship in the industrialized countries would not affect welfare dramatically. Output decreases would not sharply deteriorate the standard of living of the population. On the other hand, the subsistence condition of many inhabitants of developing countries creates a completely different situation. For them, an increase in warfare would create a crisis situation at the welfare level. Considering that developing countries allocate three times more fiscal resources to the military than to health, and one third less to education than to the armed forces, this linkage appears evident (see table 2 below).

Table 2. Public expenditures per capita, 1982

(US dollars)

<table>
<thead>
<tr>
<th>Area</th>
<th>Military</th>
<th>Health</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed</td>
<td>487</td>
<td>445</td>
<td>495</td>
</tr>
<tr>
<td>Developing</td>
<td>43</td>
<td>14</td>
<td>32</td>
</tr>
</tbody>
</table>


/...
32. These are some of the reasons why some analysts conclude that there is an incompatibility between peace and welfare. It is supposed that a peace model of development should be self-reliant and protected from the pervasive negative influences of uncontrolled technological innovations. Nevertheless, these models would not provide welfare due to "the existence of an incompatibility between the welfare dimension of development (calling for industrialization) and the peace-intensive model of development (endangered by industrialization)."

33. This scepticism on the possibility of reaching a balance between modernization, welfare and peace has become one of the main results of the long-term controversy among those favouring military expenditures due to their potential benefits for growth - as in industrialized countries - and those who, confronting the controversial evidence on this relationship, try to find other ways for supporting a peace-oriented economy and society.

34. Major researchers and expert reports have indicated that, in the long run, the overall socio-economic consequences of sizeable military outlays in developing countries outweigh any short-term economic spin-offs into the civilian sector. But individual analysts also report that, in some cases, defence expenditures did not adversely affect the welfare of the people.

35. To examine the relationship between militarization and development in five main subregions of the developing countries, this paper takes into account four major dimensions of militarization, i.e., military spending, military personnel, arms imports and military industries. The analysis framed in the period 1975-1983 and placed in subregional settings shows non-conclusive results of the impact of increases in military expenditures on the rates of economic growth. The empirical evidence for 96 third world countries, divided into five subregional settings, shows sharp differences among them (see tables 3, 4 and 5 below).

Table 3. Correlation coefficients between military expenditures and GNP increases, 1975-1983

<table>
<thead>
<tr>
<th>Year</th>
<th>Middle East and Northern Africa</th>
<th>Africa</th>
<th>Asia and Oceania</th>
<th>Latin America and the Caribbean</th>
<th>OPEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>0.81</td>
<td>(0.01)</td>
<td>(0.42)</td>
<td>(0.40)</td>
<td>(0.45)</td>
</tr>
<tr>
<td>1976</td>
<td>0.81</td>
<td>0.99</td>
<td>(0.14)</td>
<td>(0.26)</td>
<td>0.60</td>
</tr>
<tr>
<td>1977</td>
<td>0.78</td>
<td>0.99</td>
<td>0.99</td>
<td>(0.07)</td>
<td>0.86</td>
</tr>
<tr>
<td>1978</td>
<td>0.68</td>
<td>0.99</td>
<td>0.98</td>
<td>(-0.06)</td>
<td>0.55</td>
</tr>
<tr>
<td>1979</td>
<td>0.78</td>
<td>0.99</td>
<td>0.96</td>
<td>(-0.17)</td>
<td>0.52</td>
</tr>
<tr>
<td>1980</td>
<td>(0.36)</td>
<td>0.99</td>
<td>0.96</td>
<td>(-0.14)</td>
<td>0.57</td>
</tr>
<tr>
<td>1981</td>
<td>0.61</td>
<td>0.99</td>
<td>0.97</td>
<td>(-0.28)</td>
<td>(0.49)</td>
</tr>
<tr>
<td>1982</td>
<td>0.65</td>
<td>0.99</td>
<td>0.97</td>
<td>(-0.24)</td>
<td>(0.44)</td>
</tr>
<tr>
<td>1983</td>
<td>(0.55)</td>
<td>0.99</td>
<td>0.94</td>
<td>(-0.02)</td>
<td>(0.50)</td>
</tr>
</tbody>
</table>

Source: See methodological appendix below.
### Table 4. Correlation coefficients between military personnel and GNP increases, 1975-1983

<table>
<thead>
<tr>
<th>Year</th>
<th>Middle East and Northern Africa</th>
<th>Africa</th>
<th>Asia and Oceania</th>
<th>Latin America and the Caribbean</th>
<th>OPEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>(0.40)</td>
<td>(0.01)</td>
<td>(0.29)</td>
<td>(0.21)</td>
<td>(0.53)</td>
</tr>
<tr>
<td>1976</td>
<td>(0.22)</td>
<td>(0.01)</td>
<td>(0.05)</td>
<td>(0.16)</td>
<td>0.74</td>
</tr>
<tr>
<td>1977</td>
<td>0.64</td>
<td>0.94</td>
<td>0.92</td>
<td>(0.33)</td>
<td>0.59</td>
</tr>
<tr>
<td>1978</td>
<td>(0.16)</td>
<td>0.94</td>
<td>0.90</td>
<td>(0.23)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>1979</td>
<td>(0.13)</td>
<td>0.94</td>
<td>0.86</td>
<td>(-0.01)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>1980</td>
<td>(0.42)</td>
<td>0.96</td>
<td>0.91</td>
<td>(-0.09)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>1981</td>
<td>(0.13)</td>
<td>0.97</td>
<td>0.87</td>
<td>(-0.06)</td>
<td>(0.10)</td>
</tr>
<tr>
<td>1982</td>
<td>(0.07)</td>
<td>0.90</td>
<td>0.85</td>
<td>(-0.18)</td>
<td>(-0.01)</td>
</tr>
<tr>
<td>1983</td>
<td>(0.02)</td>
<td>0.93</td>
<td>0.85</td>
<td>(-0.19)</td>
<td>(-0.04)</td>
</tr>
</tbody>
</table>

**Source:** See methodological appendix below.

### Table 5. Correlation coefficients between arms imports and GNP increases, 1975-1983

<table>
<thead>
<tr>
<th>Year</th>
<th>Middle East and Northern Africa</th>
<th>Africa</th>
<th>Asia and Oceania</th>
<th>Latin America and the Caribbean</th>
<th>OPEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>(-0.12)</td>
<td>(-0.13)</td>
<td>(-0.10)</td>
<td>(0.07)</td>
<td>0.58</td>
</tr>
<tr>
<td>1976</td>
<td>0.15</td>
<td>(-0.13)</td>
<td>(-0.14)</td>
<td>(0.18)</td>
<td>(-0.06)</td>
</tr>
<tr>
<td>1977</td>
<td>(-0.13)</td>
<td>0.88</td>
<td>0.99</td>
<td>(0.12)</td>
<td>(0.35)</td>
</tr>
<tr>
<td>1978</td>
<td>(-0.11)</td>
<td>0.80</td>
<td>0.99</td>
<td>(-0.12)</td>
<td>(0.39)</td>
</tr>
<tr>
<td>1979</td>
<td>(0.09)</td>
<td>0.88</td>
<td>0.98</td>
<td>(0.08)</td>
<td>(0.14)</td>
</tr>
<tr>
<td>1980</td>
<td>(-0.18)</td>
<td>0.92</td>
<td>0.99</td>
<td>(-0.01)</td>
<td>(0.42)</td>
</tr>
<tr>
<td>1981</td>
<td>(-0.14)</td>
<td>0.97</td>
<td>0.99</td>
<td>(-0.20)</td>
<td>0.59</td>
</tr>
<tr>
<td>1982</td>
<td>(-0.15)</td>
<td>0.96</td>
<td>0.98</td>
<td>(-0.03)</td>
<td>(0.53)</td>
</tr>
<tr>
<td>1983</td>
<td>(-0.14)</td>
<td>0.99</td>
<td>(0.22)</td>
<td>(0.21)</td>
<td>(0.35)</td>
</tr>
</tbody>
</table>

**Source:** See methodological appendix below.
36. Increases in military expenditure in the Middle East and Northern Africa were positively associated with GNP increases after one year. All correlation coefficients were high, and in only two years—1980 and 1983—this association did not exist. Nevertheless, correlation coefficients analysing the impact on GNP two years later reduced this deviation only for 1981. The association between both variables is higher in Africa except for 1975. The same is true for Asia and Oceania, but the two first years under observation showed no significant association. In Latin America and the Caribbean, the association is not significant, but it grew from 1975 onward from a positive to a negative one. Finally, OPEC countries did not follow any discernable pattern.

37. It is possible to draw some limited conclusions from these cases. In the Middle East and Northern Africa, and in sub-Saharan Africa, the conflict situations in the former and the nation-state building process in the latter would explain the simultaneous increases in military expenditures and in GNP. Nevertheless, in the Latin American area, although the association is not significant, due to the small number of the sample, there was a change—starting in the late 1970s—from a positive to a negative association. Finally, OPEC countries did not show a particularly clear pattern, but there was a positive association between both variables.

38. The relative abundance of resources in this period could provide an explanation for these figures. Tracing the effect of GNP increases over military expenditures, it was found that the availability of financial resources for some developing countries, permitted them to increase their military budgets. The financial bonanza observed in OPEC countries, and the indebtedness in other parts of the third world could define the period 1973-1983 as the one in which militarization was common with differences in degree among various subregions.

39. In sum, the simple correlation between military expenditures and GNP showed that increases—one or two years before—in military burdens in general did not negatively affect GNP one and two years after. The exception is seen in Latin America and the Caribbean where the debt payment/exports ratio was the worst among developing countries, creating a crisis after 1980 when the correlation of the association between military expenditures and GNP started to be reversed.

IV. DISARMAMENT AND DEVELOPMENT: SOME CONCLUDING REMARKS

40. In identifying some of the major dimensions of militarization, this paper also stresses that measures of disarmament in the developing countries would need to be addressed in accordance with their relative prominence in different parts of the third world.

41. It could be reasonably stated that arms race and development are in a competitive relationship. Arms race and underdevelopment are not two problems: they are one. They must be solved together, or neither will ever be solved. 16/ Nevertheless, the relationship between both has been questioned from other standpoints. It has been stated that "disarmament alone can hardly be a key to the solution of all the problems of social and economic development", although it is recognized that it would help to resolve them. 17/ Others take the position that
"only a proportion of the population benefits in any sense from the process of transfer of military resources to civilian purposes, and major social inequities remain together with basic social and human problems which appear more intractable." 18/

42. Demilitarization or reduced military burdens may release additional resources, but their reallocation for purposes of socio-economic development would require political decisions for combining the goals of economic growth with those of redistribution among weaker sections of society.

43. Since it is not possible to foresee an assured reallocation of resources released by disarmament, it is important to stress that those savings could be used for the growth of the currently existing economic structures of the developing countries in the social dimension of development, that is education and health. One of the objectives of disarmament is to draw fiscal resources from the military. The task for politics is then to assure their adequate allocation to economic and social development.

44. In addition to the constraints linking disarmament to development within societies, there are also international limitations. As pointed out in the Secretary-General's report on the relationship between disarmament and development, world disarmament is needed for world development but, equally, world development is a prerequisite for world disarmament. Not until there is a situation of reasonable equity and economic balance in the world, will it be possible to develop conditions for a lasting disarmament. 19/ Undoubtedly, this precondition makes it much more difficult to reach either disarmament or development in developing countries, owing to the current international economic conditions of recession, price instability and restricted possibilities for additional assistance to the developing countries.

45. Other problems relating disarmament to development have also been recognized, such as the difficulties of restructuring demand, the effects of freeing resources, the need to change production techniques and the creation of civilian employment.

46. Realistically it could be stated that the negative impact of militarization would not end immediately with disarmament in the developing countries. Even where there is undoubtedly a need for structural changes among those countries, disarmament should be considered as a single reality, not solving by itself all the other important but wider and much more difficult structural transformations. 20/

47. Meanwhile, as the process of disarmament goes through its various stages, it would be necessary to identify those measures that are crucial for any project of global transformation. The main problem then, would be "how to go from an economy structured around arms production to another organized on market principles." 21/ Whatever the kind of society the developing countries may wish to live in, they would need the assurance of an international environment rescued from the arms race.

48. According to estimates made by a subregional study, realistic savings in military expenditures maintained during a couple of decades could represent a volume of resources equivalent to the whole GNP of South America in a year. 22/
Such a projection should be made for other subregions of the world. Evidence of the real impact of disarmament on growth and development could be an important tool for encouraging military restraint by the developing countries.

49. Considering that the rest of this decade is likely to be characterized by recessive economic conditions for developing countries, it would be important to emphasize the need for decreasing military expenditures to overcome the crisis. Since this crisis is also affecting OPEC, as well as other Middle Eastern and North African States, it could be possible to plug disarmament initiatives into economic negotiations.

50. Along with a greater awareness of the positive results of decreasing military expenditures, attention needs to be devoted to overcoming the reservations about the likely displacement of military personnel through measures of disarmament. Reductions in military personnel introduce the problem of the absorption of retired military personnel. As it has been suggested, "it would be a major physical, technical and economic challenge to reemploy them for civilian purposes immediately in the wake of a process of 'genuine disarmament'." 23/ Nevertheless, it is also possible to implement other convergent measures. Although military performance of civilian roles may have reinforced the functional independence of the military, it would be possible for those countries with a high military/population ratio to redeploy military personnel to civilian, state-managed developmental functions. Some countries have had experience in training people in civilian skills. These kinds of relief measures could be useful for some subregions.

51. It would be unrealistic to call for an alternative strategy of development based on labour-intensive technology and national self-reliance without planning for alternatives in the military sector as well. Disarmament must be understood as a structural precondition to transform the present mode of technology transfer towards a development orientation. 24/

52. As mentioned earlier, arms imports by the developing countries did not necessarily imply reduction of military personnel: in some cases both increased pari passu in the past. The fact that during the current economic crisis there has been a decrease in the arms inflow to some subregions could be used as an additional argument for examining the consequences of such transfers.

53. Another set of measures could be directed towards military industries. Success in installing these industries in the developing countries has been an example of the managerial and investment capabilities in these countries for manufacturing modern products. The industrial infrastructures developed to meet the demand for weapons could be useful for modernization of the civilian sector.

54. The possibilities for the development of dual-purpose technologies could promote disarmament and development. The aerospace industry, for example, lends itself easily to civilian use, whereas industries such as the missile manufacture technologies may require some reorientation for conversion. Developing countries could promote the production of goods for civilian use by military industries by "civilianizing" and restructuring their functioning. A new way of technological-civilian integration between North and South could decrease the current leverage of the military-technocratic elite which is an important element of militarization.
55. Finally, considering the triangular relationship among development, disarmament and security, a gradual approach should be emphasized, focusing on individual dimensions of militarization, in individual third world subregions. This emphasis on individual dimensions of disarmament and development, and reiterative concern on a subregional approach is nothing but a plea for realism and effectiveness.

Notes


11/ *Economic and Social Consequences of Disarmament* (United Nations publication, Sales No. E.62.IX.1); *Economic and Social Consequences of the Arms Race and of Military Expenditures* (United Nations publication, Sales No. E.72.IX.16); ibid., (United Nations publication, Sales No. E.78.IX.1); ibid., (United Nations publication, Sales No. E.83.IX.2); *The Relationship Between Disarmament and Development* (United Nations publication, Sales No. E.82.IX.1); Report of the Independent Commission on Disarmament and Security Issues, *Common Security: A Blueprint for Survival*. Transmitted to the members of the Disarmament Commission by a note of the Secretary-General (A/CN.10/38).
Notes (continued)

Independent Commission on Disarmament and Security Issues under the Chairmanship of

13/ Gordon Adams, "Economic conversion misses the point", Bulletin of the


16/ The Relationship Between Disarmament and Development (United Nations
publication, Sales No. E.82.IX.1).

17/ Geory Kim, "The arms race and its consequences for developing
countries", Strategic Digest, February 1985.


19/ The Relationship Between Disarmament and Development (United Nations
publication, Sales No. E.82.IX.1).

20/ Richard Jolly, "Objectives and means for linking disarmament to
development", Richard Jolly, ed., Disarmament and World Development (New York,

21/ Angel Viñas, "Desarme y desarrollo", Documentación Social,

22/ CIESUL, Gastos Militares y Desarrollo en América del Sur (Lima,


24/ Peter Lock, "New international economic order and armaments", Elements of
World Instability: Armaments, Communication, Food, International Division of
Labour (Frankfurt, Campus Verlag, 1981).

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METHODOLOGICAL APPENDIX

1. The analysis of the association among dimensions of militarization and growth has been made using the information provided by the Asian Centre for Development Administration (ACDA). *World Military Expenditures and Arms Transfers, 1985* (Washington, D.C., August 1985). All the information used in the calculations was processed with the Statistical Program for the Social Sciences.

2. The limitations of different sources of military expenditures are well known (Brzoska, 1981; Tullberg-Millán, 1983; Ball, 1984). Nevertheless, it was decided to use the figures of ACDA, which make it possible to compare different dimensions of militarization, such as data on imports, exports, personnel and fiscal expenditures. In addition, even though ACDA tends to underestimate the level of expenditures, the long-term curve - its upward and downward trends - is more or less equal to that of other reliable international sources such as the Stockholm International Peace Research Institute (SIPRI), and it provides more additional information.

3. The third world was divided into five main subregions. Countries in each area are the following:

(a) Middle East and Northern Africa: Bahrain, Cyprus, Democratic Yemen, Egypt, Israel, Jordan, Lebanon, Morocco, Oman, the Sudan, the Syrian Arab Republic, Tunisia and Yemen;

(b) Sub-Saharan Africa: Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, the Congo, Ethiopia, Ghana, Guinea-Bissau, the Ivory Coast (Côte d’Ivoire), Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Togo, Uganda, the United Republic of Tanzania, Zaire, Zambia and Zimbabwe;

(c) Asia and Oceania: Afghanistan, Bangladesh, Burma, China, Democratic People’s Republic of Korea, Fiji, Malaysia, Nepal, Pakistan, Papua New Guinea, the Philippines, the Republic of Korea, Singapore, Sri Lanka and Thailand;

(d) Latin America and the Caribbean: Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago and Uruguay;

(e) OPEC countries: Algeria, Ecuador, Gabon, Indonesia, Iran (the Islamic Republic of), Iraq, Kuwait, Libyan Arab Jamahiriya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela.

4. Single correlation coefficients were calculated linking increases in military expenditures and increases in GNP, personnel and arms imports. Initially, only yearly increases were associated. Accordingly, the impact of GNP/military expenditures was calculated in both directions separating all series by one and two years.

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5. Calculations were made observing the behaviour of individual countries in separate years. Accordingly, it was possible to work out a single correlation coefficient by subregion, for each year. Working with indexes (1973=100), and distancing the impact in one year, calculations were started with the impact of the 1973-1974 increase over 1975, finishing with the effect of 1982 on 1983. The work was done at a 0.05 level of significance.

6. In addition, in a second round of calculations, association between military expenditures and GNP was established for the five main third world subregions, calculating the average of all yearly increases in both. Accordingly, it was possible to obtain one value for each subregion in each dimension of militarization. The results of the latter, consistent with the previous ones, can be observed in the table below:

| Correlation coefficient between military expenditures and GNP increases, 1978-1983 |
|-----------------------------------------------|-----------------------------------------------|
| Middle East and | Africa | Asia and | Latin America and | OPEC |
| Northern Africa |        | Oceania | the Caribbean     |      |
|                  | (0.16) |        | (0.06)           | (0.35) |
|                  | (0.38) | (-0.28)|                  |      |

7. Finally, the author wishes to thank the invaluable methodological and statistical assistance of Professor Angle Flisfisch and Professor Mauricio Culajovski, the former for his insights into the matter, the latter for also processing the data. Nevertheless, the analysis, opinions and conclusions contained in this report are the exclusive responsibility of the author.