

# CONFLICTS IN DEVELOPMENT PLANNING

## —Case Study of Papua New Guinea—

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THE CASE of Papua New Guinea (P.N.G.) has suggestions to offer for a better understanding of policy choice in the developing world. To make this task easier, it will be necessary to analyze the alternatives and discuss the problems in the planning process. So that we can more clearly grasp what is going on, it will also be necessary to briefly give a background introduction to the economy and society in this area and then move onto the problems of paradigm choice and intra- and inter-sectoral conflicts that arise from putting the government's Eight Point Plan into practice. Growth-oriented development is not appropriate for Papua, which is, by and large, a society of equals. The growth-oriented development strategy of the Western world causes inequality in income distribution as development and distribution are left mainly to market forces. Another reason for this is the seemingly increased concern for distributional and social welfare goals in economic planning.

### I. THE SOCIOECONOMIC STRUCTURE OF PAPUA NEW GUINEA

Papua<sup>1</sup> is the largest Melanesian and Polynesian territory in the South Pacific, both in respect to area and population. The economy is paradoxical. It has primitive, less-developed, and modern aspects existing concomitantly. The primitive subsistence sector reminds us of a horticultural society of about ten thousand years ago. Its modern sector—trade, money and banking, urban housing and construction, communication, postal and telegraph service—reminds us of an industrial state like Australia.

#### A. *Subsistence Sector*

In most Papuan societies, subsistence livelihood was in effect, guaranteed as a normal part of membership in clan or tribe. It is considered one's social right to receive support and help from friends, kin, and clan leaders in both peace and war. In this primitive and affluent society the fear of hunger has never been an incentive to participate in economic activity; even the quest for

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<sup>1</sup> "Papua" means Papua New Guinea in this article. Papua and New Guinea are separate islands. The word "and" between "Papua" and "New Guinea" has been dropped by the act of legislature recently.

profit, individual gain, and interest is not considered adequate to explain their economic activity. The extended family, clan, or tribe, i.e., *wantok* system is the basic economic unit in the subsistence sector. The people produce what they need for consumption subject to the physical environment and the influence of social and religious custom. Here again the pattern of social mobility, with the exception of such places as Trobriand, is guided by mandatory participation in community activities rather than by hereditary considerations.

Since the small subsistence unit controls its own production, its technology is adequate for a minimum subsistence level. The scope for specialization and division of labor is generally one of age and sex. This is in contrast to modern industrial society where impersonal market forces and occupational specialities determine the division of labor. Furthermore, our analysis of Papua seems to show a natural tendency for man to work for a minimum level of food, clothing, and shelter. Increased output beyond that level, must be understood in terms of social accomplishment rather than economic achievement. In most Papuan societies, when a man starts to trade pigs for other goods and to lend pigs to others, the increase in wealth beyond the necessary minimum is regarded as a test of social esteem. This will enable him to participate prominently in pig festivals and bride wealth exchange and to acquire the social status and reputation of a *bikpela man* ("big man"). Through furthering his own career, he is also serving the interests of the group to which he belongs because this sense of belonging is the strongest motivation in his work [4, pp. 17-18]. Any strategy for development of the subsistence sector requires a deeper understanding of this all-pervasive psychological factor.

It would be a mistake to assume that in this social milieu, the worker has little incentive to produce. What is crucially important is that through education he feels kinship beyond the group and likewise attempts are made to achieve social esteem in this larger group by increasing output. In a market economy we hardly look beyond the individual.

#### B. *Uniqueness of the Economy*

The economy and society of Papua is different from other LDCs in six ways.

(1) Unlike most developing countries in Africa and Southeast Asia, agriculture's contribution to GNP is relatively small. It is estimated that "in 1960, subsistence agriculture accounted for two-thirds of the imputed value of GDP, but by 1970 activities by the monetary sector contributed a similar proportion. This remarkable reversal of positions came about because of an average annual compound growth rate of 14.2% at constant prices in the monetary sector, whereas the physical output of subsistence agriculture is estimated to have expanded by only 2.5% over the same period" [1, p. 3].

This does not mean that agriculture is relatively unimportant. In fact, the future of the country in which an expansion into cash activity is necessary depends greatly on the potential that exists in the agricultural sector. Even today, about 90 per cent of the indigenous population lives on subsistence agricultural production such as that of sweet potatoes in the Highlands and

taro and yams on the coast. In this respect, Papua is of course the same as most other LDCs. In addition, coconuts, bananas, fruit, and vegetables are grown. Farmers use the shifting cultivation method with periods of bush fallow [3, p. 92].

(2) Papua New Guinea is different from LDCs like India, in that there is no widespread grinding poverty and malnutrition. Little of the food supply problem so common in LDCs is evident in Papua.

(3) Unlike most Asian and Central American countries the problem of population in the quantitative sense is virtually nonexistent in P.N.G. although the population is growing very quickly in some areas. The average density in Papua New Guinea is little over six persons per square mile. This will enable P.N.G. to concentrate on improving the quality of its population.

(4) P.N.G. is also unique for its size. There are less than 2.5 million people spread over an area of 178,260 square miles—an area more than three times the size of Bangladesh with its population of over 70 million. Despite the fact that mountain ranges extend throughout the length of the islands, a relatively densely populated agricultural area is a strong base on which to extend cash cropping. “Among many peoples, ownership of land is rested in groups. Corporate control is suitable for traditional shifting cultivation and facilitates the pooling of financial resources to invest in costly capital items” [3, p. 93]. This social belief in corporate ownership may be utilized profitably for social and economic transformation of the society without loss of continuity.

It may be argued that the experience in Africa and the historical evidence from Europe suggest that individual ownership is chiefly responsible for substantial improvements in agricultural productivity. But we must not forget that the socioeconomic structure in Papua is substantially different from both Africa and Europe.

(5) Unlike most Southeast Asian and Latin American countries there are no educated unemployed in P.N.G. If there were, it would enable P.N.G. to adapt a strategy of manpower planning realistic enough to avoid the mistakes made elsewhere. In some LDCs, the educated unemployed are a great problem. For instance, the total number of educated unemployed in India in 1975–76 is estimated to reach approximately the total of all educated people in India for 1960–61 [6, p. 11]. But unlike the developing countries in Southeast Asia, Papua is heavily dependent on expatriates who make up only 2.1 per cent of the total population. “According to the 1971 census, virtually all [96.1 per cent] professional, managerial, and executive positions were held by expatriates. In the sub-professional class, 70.3 per cent of the work-force were expatriates and among skilled, tradesmen and clerks the proportion [*sic*] was 53.1 per cent. Indigenous workers however, predominated in the lower-skilled occupations” [1, p. 4].

(6) Unlike many LDCs Papua is in a relatively good situation as far as being able to avoid excessive defense expenditure. The cost of symbolic displays of independence is avoided as a result of the absence of any visible external threat to that independence, and by Australia's willingness to transfer

power with clear promises of economic aid. Its well-integrated *wantok* system will place less pressure on the government for social security as in Australia. This should enable P.N.G. to concentrate a higher proportion of its funds for developing the social and physical infrastructure on education, roads, dams, hydroelectric power, and so on.

### C. *Monetary Sector of P.N.G.*

Like most LDCs the monetary sector is expanding very rapidly. In the period from 1971 to 1973, Bougainville copper has raised mining's share of Papua's GNP to about 27 per cent [1, p. 5]. Thus, balance of payments are likely to improve in years to come. The guarantee by Japan, West Germany, and Spain to purchase Bougainville copper for at least fifteen years, the further exploration for copper and other ventures should assure a steady flow of foreign exchange earnings vitally needed for social and economic development. Viewed from this perspective, P.N.G.'s \$41.3 million debt to multilateral agencies is not a major problem. P.N.G. is in a favorable situation compared to most LDCs in Asia, Africa, and Latin America where debt-servicing is a great problem. At present, the very low rate of domestic saving by indigenous people increases the dependence of P.N.G. on private inflow, and the prospects for this dependence do not look promising now because of the uncertainty of future fiscal and monetary policies in an independent P.N.G. Capital inflow for the public sector, however, may grow as countries such as Japan and the United States have shown interest in supplementing Australia's aid. Nevertheless, it is desirable that the government announce a general policy declaration spelling out detailed investment guidelines which would dispel the uncertainty associated with independence.

### D. *Planning*

The first systematic planning effort in P.N.G. started with the World Bank Mission in 1964. Following the mission, a five-year development plan was prepared covering the period from 1968 to 1973. The program called for an expenditure of nearly \$1,000 million, with an emphasis on economic growth. The commencement of the Bougainville copper project has been the outstanding economic event since 1968. The improvement plan of 1973-74, prepared under the supervision of the self-governing nation, is based on the Eight Point Plan. The emphasis is on rural development, distributional and social welfare goals in economic planning.

## II. THE PROBLEM OF CHOICE OF PARADIGM

The appropriate choice of a socioeconomic paradigm is crucial in the process of development and social change. What is needed is a vision for the beginning, a sense of perception of change and an appropriate choice of institutions to implement the paradigm. The question of choice of appropriate paradigm, the conflict and crisis in LDCs, may be thought of in terms of: (1) resistance, (2) misperception, (3) inability, (4) inexperience, (5) interdependence.

### A. *Resistance*

Any nation which becomes independent after having colonial status requires not only functional but structural change in its political, social, and economic system. This choice of social framework involves the rejection of many old values and social statuses operative during colonial days. The imposition of colonial rule without exception has led to the emergence of a new indigenous elite imbued with the values of a borrowed culture. The modernizing leaders who belong to this elite class are likely to resist change—change which may bring their own living standard down to that of local levels and capacity. In addition, there will be resistance by feudal lords, local leaders or chiefs which will add further uncertainty.

### B. *Misperception*

Paradoxically most leaders who reach the heights of power in the post-independence period are either direct or indirect products of colonial rule. The historical experience of ex-colonies shows that with some major exceptions, they have special difficulties in perceiving ongoing change. "The obstacles to the perception of change thus turn into an important obstacle to change itself" [5, p. 335].

### C. *Inability*

A country's incompetence in perceiving necessary change makes for a sense of uncertainty which in turn creates chaos throughout the society. Chaos and confusion start from the failure in leadership to redirect the forces in action which were needed for independence. It is not an easy task to convert destructive forces into creative ones and use them to build a new order. While charismatic leaders, by their wonderful power and authority, can carry whole peoples with them to destroy the old order, it requires tremendous tact and imagination to develop a continuing sense of positive crisis so that the forces of construction and motivation will work. A society moves unconsciously only when the teaching of its founders are thoroughly internalized; a very time-consuming process that may take decades. The historical experience suggests that leaders possessing charisma but lacking skill cannot move their societies one inch [2, p. 48]. "Skill requires a stronger than average ability to perceive change, while charisma is based in part on a stronger than average refusal to do so. The charisma and the skill requirements of leadership, thus, are often at loggerheads, and the most effective leaders are likely to be those who can somehow accommodate both" [5, p. 340]. Such accommodation is rarely found in LDCs. As a result, in most emerging nations of Asia, Africa, and Latin America, the leaders either look to a ready-made neoclassical orthodox paradigm or the Marxian-radical paradigm as their guide to development and change. But many of the assumptions on which these paradigms are based are either misleading or inappropriate to LDC conditions. The fundamental assumptions of the neoclassical orthodox paradigm are unrealistic in many cases, such as the alleged harmony of interest between working class, firms, and government and the resulting emphasis on

the maintenance of the status quo. There is also the myth of "countervailing power" in which different groups have roughly equal powers and the opportunity to organize, under the consumers' sovereignty, according to the weight attached to private rather than public goods. Similarly, some assumptions in the orthodox Marxian paradigm such as collective ownership of the means of production, producers' sovereignty, and discontinuous change contrasted with gradualism are, in many cases, inconsistent with the norms and prevailing values of the Third World countries.

#### D. *Inexperience*

As stated earlier, since they are the product of alien social conditions, leaders gain experience detached from tradition; and few leaders can link this experience to the people's milieu. Such inexperience tends to lead to a country's dependence on experts who formulate development strategy on an ad hoc basis. It is a vicious circle of the leader's inadequacy to perceive the desired style of change, the development of inappropriate institutions which cannot, by definition, take action to exploit the opportunities coming from change in the society and the full potentialities of the society are never explored and it remains underdeveloped.

#### E. *Interdependence*

The growing contradiction between independence and interdependence both at national and international levels is at the heart of the current developmental crisis. At the national level, when social crisis arises coordination of political and economic power is imperative to diversify the use of shared resources. This is a special case of the general phenomenon of externalities, occurring whenever the activities of one person affect the welfare of those who have no direct control over that activity. This process of implicit or explicit integration and central coordination has rightly or wrongly generated social tensions which are further aggravated by an increasing dependence of small independent nations on dominant nations. An independent underdeveloped country needs the know-how and the assistance for development whereas leading nations need the raw materials from and the markets of the dependent nations. This places the "late-comers" in a very disadvantageous position in that leading countries may not approve a pattern of change in the socioeconomic structure not like their own [5, p. 334]. Recent experience in Latin America, Southeast Asia, and Eastern Europe bear ample testimony to this fact.

### III. PARADIGM CHOICE FOR PAPUA

From a discussion of paradigm choice in general our attention should turn to a specific case. What are the problems for Papua New Guinea. It is perhaps too early to discuss this question in full because some of the issues raised will be best understood only in the post independence period. But given the present situation, the problem of choice of appropriate paradigm for P.N.G. is perhaps less serious for several reasons.

(1) Unlike many LDCs in Southeast Asia and Latin America, P.N.G. societies basically are not stratified. True, the imposition of colonial rule on these societies has profound implications for economic, education, and social policy. Colonial rule has, among other things, led to the emergence of a relatively new and quasi-Western social class. Unlike most LDCs this group is still relatively weak and likely to put up less resistance to a socially just development.

(2) There is an increasing awareness among leaders that what is good for Australia may not be good for P.N.G. The realization is growing on that the increased mechanization and division of labor and the usefulness of technology are *not* to be judged in terms of efficiency, productivity, optimality, and profitability, but in terms of human fulfilment. The Government Eight Point Plan emphasizes, among other things, equality of service, decentralization, localization, and self-reliance in sharp contrast to the growth-oriented strategy pursued before 1972.<sup>2</sup>

(3) Unlike most former colonies in Africa, Asia, and Latin America, the relationship between P.N.G. and Australia is not bitter. Australia's enthusiasm and willingness for an early transfer of power and continued economic aid after independence and P.N.G.'s somewhat reluctant acceptance of early independence without preparation have placed P.N.G. in a unique situation.<sup>3</sup> The conflict

<sup>2</sup> A good way to see the shift in emphasis is to compare the aims of development strategy under the previous administration before 1974 with the Eight Point Programme of the new government in 1974.

Former objectives were: maximum participation by Papuans and New Guineans at all levels; maximum practicable progress towards financial self-reliance; maximum practicable contribution to meeting social needs and raising the level of living of the people; maximum increases in production consistent with financial and manpower resources and market capacity (reproduced from [12, p. 3]).

But the new government has adopted, with the approval of the House of Assembly, an eight point statement of basic aims for the Improvement Programme. These eight points provide the basic reference for future planning in P.N.G. They are considered a critical element in the nation's development strategy. The eight points are as follows: (a) a rapid increase in the proportion of the economy under the control of Papua New Guinean individuals and groups and in the proportion of personal and property income that goes to Papua New Guineans; (b) more equal distribution of economic benefits, including movement towards equalization of incomes among people and towards equalization of services among different areas of the country; (c) decentralization of economic activity, planning, and government spending, with emphasis on agricultural development, village industry, better internal trade, and more spending channelled to local and area bodies; (d) an emphasis on small-scale artisan, service and business activity, relying where possible on typically Papua New Guinean forms of business activity; (e) a more self-reliant economy, less dependent for its needs on imported goods and services and better able to meet the needs of its people through local production; (f) an increasing capacity for meeting government spending needs from locally raised revenue; (g) a rapid increase in the equal and active participation of women in all forms of economic and social activity; and (h) government control and involvement in those sectors of the economy where control is necessary to achieve the desired kind of development (reproduced from [11, p. 2]).

<sup>3</sup> The opposition United Party is the largest single party in the House of Assembly and does not favor premature independence.

arising from interdependence as explained earlier is likely to lose some force. But at present, the Australian private sector involvement in the P.N.G. economy both directly in the form of labor and capital and indirectly through international trade links is really far-reaching. It remains to be seen how the interests of Papua New Guinea will be reconciled with private sector interests in Australia. It is, of course, not easy to change orders of priority when the colonial pattern of production has been fixed in a particular mould.

(4) It has been shown that the economic and social structure of Papua New Guinea is different from many LDCs of the world in several ways. This unique character should give its leaders actual and potential strength to develop P.N.G. into a new welfare state. It appears that leaders of Papua New Guinea will not make the frantic rush into economic growth [11, pp. 1-2]. As such they stand the greatest chance of resolving the conflicts inherent in the development or "improvement" process.

#### IV. THE EIGHT POINT PLAN: CHALLENGE AND DECISION

This general view of development should prove its usefulness in dealing with the important issues of the Eight Point Plan. Economists have not yet been able to construct a neat theory of development to explain social and economic transformation particularly of an economic system based on tradition. Nevertheless, theoretical reasoning supported by operational experience can be applied to explain conflicts in the determination of investment priorities, and in different sectors of the economy such as agriculture, industry, water, power, education, health, and so on. The Eight Point Plan has laid down clear guidelines for development strategy of Papua New Guinea but it is not without internal inconsistencies. In order to make the public decision-making process more easily understood the actual and potential conflict in the Eight Point Plan may be thought of in terms of: (1) agricultural development, (2) rapid Papua New Guinean participation, (3) decentralization of economic activity, (4) distribution of income, (5) physical and social infrastructure.

##### *A. Agricultural Development*

The Eight Point Plan lays great emphasis on agriculture and small enterprise development. This is logical and highly consistent with the overall objectives of equitable distribution of income and welfare. Public expenditures for agricultural development, village industry, small-scale artisans, service and business activity, relying where possible on typical Papua New Guinean forms of business activity, will certainly offer more attractive opportunities to local people than ever before.

In Papua New Guinea, increase in agricultural productivity is a basic solution to the problem of equitable distribution of income, as it provides a simultaneous basis for increase in mass consumption, saving, and taxation resulting from the rise in farm incomes [7, p. 96]. But the path of development is not linear. A conflict between the agricultural sector and the mines and plantations sector seems inevitable for three reasons:



First, mines and plantations are normally large-scale enterprises, usually requiring more labor per unit of land than peasant agriculture [10, p. 53].

Second, P.N.G. is very sparsely populated with a native population of less than 2.5 million.

Third, the subsistence sector is relatively affluent compared to many LDCs and government expenditure in agriculture will hopefully make it more attractive. For these reasons the mine and plantation sector will have to compete with agriculture and other small-scale industries for labor supply. The significance of this competition will be far-reaching.

Given the shortage of labor, the mine and plantation sector will have no other option than to raise the level of wages so that a sufficient supply of unskilled indigenous labor will be attracted from the subsistence economy. Assuming that a large number of immigrant labor may create socioeconomic problems. The matter is further complicated because these workers will not be used to industrial discipline, having to work regularly. The very rawness and inexperience of labor are likely to contribute to low initial productivity creating a gap between wages and productivity. This very fact will induce mines and plantations to adopt various labor-saving methods for raising labor productivity as was the case in American industry when it was faced with "low initial productivity of the fresh European immigrants."

The process will accelerate when the Papua New Guinea government attempts to raise the share of government profit, to improve wages and working conditions by measures such as a minimum wage level, social security, labor laws, and encouragement of trade unions. Now, if the government successfully retains foreign enterprises in mines and plantations by maintaining a balance between local and foreign interest, it may have far-reaching consequences for Papua New Guinea.

(1) Mines and plantations can be a "leading sector" in Papua New Guinea, raising productivity in the rest of the economy although the Eight Point Plan does not mention such an "unbalanced growth" strategy.

(2) The market opportunity for commodities produced by the peasant sector will expand. This will help to ensure that the wage-gap between agriculture and industry remains small and rises at the same time.

(3) A great portion of casual workers will become committed workers once they are "de-tribalized."

(4) A marked degree of economic, financial, and social dualism which appears to exist already between the modern and subsistence sector and will likely intensify. There are inevitable outcomes in the very logic of the development process. The planner's contribution is to put major emphasis as needed on raising the productivity of agriculture and on a planned increase in output from primary schools for agriculture and community work in the rural environment.

#### *B. Rapid P.N.G. Participation*

Rapid localization and increasing financial self-reliance are the two key elements of the Eight Point Plan. Currently they seem to be inconsistent. The

rapid localization of various sectors of economy such as business and industry, however socially desirable, will have immediate impact on local revenue, at least 75 per cent of which comes from expatriates and foreign companies.<sup>4</sup> The replacement of expatriates by Papua New Guineans on lower salaries will adversely affect the income tax and import duty yield. A strict examination must be given to the localization question.

The increased foreign aid volume may compensate for temporary revenue loss but make the country more dependent on overseas aid. If a choice has to be made between dependence on foreign aid and dependence on expatriates, the latter is perhaps preferable for two reasons: first, local government is in a better position to regulate and control activities to the local people's advantage; second, skills and knowledge accumulated through local working conditions can hardly be replaced by foreign aid or raw capital from other sources. If systematically controlled and regulated by government, the expatriates knowledge of the locality can have tremendous educational benefit for the indigenous people of P.N.G. despite historical animosities. This benefit should be viewed as human capital. Apart from this, increased local revenue is extremely crucial to realize improvement plan's other objectives. An equitable distribution of services implies utility creation. Thus, when the absolute level of utilities is reduced, either because of reduced expenditure on existing or for ongoing services or because of cuts imposed on new facility expansion, improvements may not take place.

But these problems can be avoided to a great extent if planners can control the demand for services by putting a price on each service sold directly to the consumer such as with electricity. But the problem is that the adjustment mechanism tends to violate the principle of social justice on which the Eight Point Plan is built. In such a situation only those rich enough to afford these services will have them and the poor individual and poor regions will be excluded. What may be needed is financial decentralization as far as would be consistent with economics of scale, and national government grants of subsidies or loans to poorer regions. Financial decentralization will enable the user to see the link between use and taxes and provide him with the will to pay more taxes for desired services [7, p. 103]. Coordination may be implemented at the national government level for efficiency and standardization. From this perspective, raising farm income is a necessity.

### *C. Economic Decentralization*

Decentralizing economic activity is vital to the Eight Point Improvement Plan. It implies setting up a number of village level industries and factories throughout the country and producing different consumer goods. This planning approach is socially desirable for an equitable distribution of economic benefits. But, with small market size created by low local per capita income and meager purchasing power in the subsistence sector, new factories and industries as a whole will not likely rely mainly on the "substitution effect" but rather will

<sup>4</sup> Public lecture by Mr. Julius Chan, M. H. A., Minister for Finance, at the University of Technology, Lae, June 20, 1974.

work through "price elasticity of demand" for goods. Its ability to reduce cost is limited by three factors:

(1) A strong mine and plantation sector in P.N.G. will attract labor by offering higher wages. Consequently the new industrial group will have to offer high wages to prospective employees.

(2) The small local market scale may serve to limit full expansion of output.

(3) An inadequate supply of local entrepreneurs is likely to adversely affect efficient resource use.

Thus, when these industries, as seems likely, are unable to reduce production cost, they will have to go beyond the local market to sell their combined products. The income increase from new wages must be supplemented by income from outside the small-scale industry sector. As long as the Eight Point Plan embraces only a part of the economy in its emphasis on agriculture and small-scale industries, there will be leakages of income to sectors outside this framework. This may lead to increased total employment and income volume, although the Eight Point Plan does not mention employment generation. A clearly critical minimum expenditure for large-scale enterprise and skilled labor industry development is implied. By their very nature, such industries are capital-intensive, needing some kind of centralization to reap economy of scale benefits and acquire existing technical know-how from developed industrial society. It is true, though, that given a large group of small-scale industries, the capacity of each to reduce cost will vary according to local resource and market availability. Quite conceivably stronger factories may stand on their own and weaker industries may need government subsidy for initial survival. Expansion of large-scale or capital goods industry nevertheless seems consistent with the development process. Furthermore the decentralization question can also be analyzed from the viewpoint of regional balance. P.N.G. areas differ widely in growth potential; some have a good supply of minerals, others water, and others good natural harbors, but some are poorly endowed. The difference in factor-endowments, particularly mines makes it impossible to have a plan which gives to each citizen equally. True, people who live near where resources are developed will benefit most they have a natural advantage. This cannot be eliminated, but can be minimized if a serious attempt is made to fully integrate the country by building appropriate infrastructure needs in other regions. This will enable people in one area to participate equally in the economic activity of another [7, p. 69]. It should be recognized that regional balance is not so much economic it is, rather, a political problem. Thus what planners can do is to prepare several alternative regional plans so that political debates center around the real problem. It has to be remembered that economic decentralization also demands decentralization in public decision-making on local finance and economic activity.

#### *D. Income Distribution*

As mentioned earlier, traditional Papua New Guinea is, by and large, a society of equals. This is why the Eight Point Plan emphasizes "equalization of incomes among people." The government's commitment to social justice is quite legiti-

mate. But the question of economic distribution should arise only when there is something to distribute. This is where growth enters. Rational policy-making is virtually impossible unless the conflicts arising from tremendous social transformation are understood. In Papua New Guinea, conflict between distribution and growth is almost inevitable in the early stages of development owing to a critical shortage of some resources (e.g., skilled personnel). The shortage can hardly be eliminated without adequate provision for incentives, in turn, causing an uneven distribution of income [7, pp. 87-96].

In most LDCs the problem is further complicated by stagnant agricultural productivity, or by rising urban wages either from trade union pressure, inflation, or a labor-dominated government. Because of these factors, the emphasis on agricultural development in the Eight Point Plan is a step in the right direction. However, the planners can contribute in the following four ways at least to solve the problem of income distribution.

(1) Suggest an agricultural development strategy which raises farm incomes not from raising food prices relative to other domestic prices but because of agricultural productivity increases. This will promote mass consumption, increase savings and taxation.

(2) Accelerate appropriate output from schools, training institutes, and universities to meet the shortage of skilled manpower.

(3) Encourage the government to tax private enterprise profits instead of raising wages. Government spending from taxes may benefit all sections of society including wage-earners.

(4) Suggest appropriate measures to control inflation.

#### E. *Physical and Social Infrastructure*

The Eight Point Plan also aims to fully implement itself by expanding social overhead services. I should like to make brief comments on both physical and social infrastructure with special reference to education even though social infrastructure refers to health, labor, and social welfare as well.

Investments in physical infrastructure are generally "lumpy" in the sense that a power or transport system has to be fairly large to run economically and efficiently. The Purari River power development project in P.N.G. is what I specifically have in mind. The decision to begin this gigantic project in itself will have a tremendous impact on expansion and technical transformation of different sectors of the economy particularly agriculture and industry. A chain of requirements will be induced for potential and actual shifts in the production function. An upward shift in production function will have its effects not only on increased production but also in the basic changes in people's life-style. In addition to social readjustment problems, painful in most cases, economic problems arise when groups of small industries are unable to absorb all functions the project requires. Consequently the current level of economic activity will have to expand or large-scale enterprises will have to be established. In such a situation many underdeveloped countries are pushed far beyond currently available human and natural resources [10, pp. 109-27]. As a result, crucial

economic choices between present and future income become blurred and confused. This is what the Eight Point Plan seeks to avoid. The plan makes a clear choice for present income. It is perhaps wise to raise the existing low consumption level even at the cost of a slower economic growth rate in the future. But a failure to appreciate the inevitable conflicting pressures may frustrate plan's objectives. In addition to "lumpiness," sectoral capital output ratios are considered very high in transport, communications, and public utilities. Besides, executing such projects is generally time-consuming. Thus, before setting up a number of factories, investment in appropriate physical infrastructure seems necessary, although the feasibility study for setting up industries should go on simultaneously.

Education investment is the most complex type of investment since it has joint consumption and investment features. In addition to externalities in education, wrong investment may bring about social instability [9, p. 164].

As indicated earlier, P.N.G. is heavily dependent on expatriate services. Without going into a full discussion of educational strategy I would like to point out two elements of education and manpower policy in Papua New Guinea which have direct bearing on the Eight Point Plan. The evidence is that emphasis is placed on secondary education [8, p. 6]. Between 1966 and 1970 "total enrolments in Territory curriculum primary schools operated by the Administration (as distinct from other agencies) increased from 65,255 to 74,487, a growth rate of 3.4 per cent per annum" [12, p. 83]. "During the same period enrolment in Territory curriculum High Schools registered a growth of 18%" [12, p. 83].

The increasing emphasis on secondary education seems to be consistent with the emphasis on industrialization, because in the industrial sector, almost all LDCs most critical manpower requirement is for people with middle-level skills, almost entirely secondary school graduates. Thus, in an important sense, the choice of priority and relative emphasis on primary or secondary education is a question of priority between agricultural and industrial development [8, p. 6].

The Eight Point Plan has made a clear choice in favor of agricultural development. As such, current priority on secondary education should be charged at least during early development stages. When resources are limited it is desirable to put priority on primary education. Such an educational policy was an important element in Japan's extremely rapid economic advance in the late nineteenth and early twentieth centuries. In early development stages it is probably more economical not to stress university education. According to the 1966 census, about 91 per cent of indigenous people lived in rural areas. Primary school graduates can be used for agricultural development through preparation by nonformal education and training. They can also be used profitably by local government to implement local development projects. If properly used, this effort can reduce the flow of internal migration to cities, and prevent social dislocation. What P.N.G. may need is a kind of social change without loss of continuity—a socioeconomic demand approach to education [8, p. 5].

A related issue in education is the controversy over quality and quantity in educational output. In a market economy we solve this problem by attaching

price tags to various education outputs indicating society's evaluation of relative worth. But, in P.N.G., the government has to make a choice between quality and quantity, a crucial decision on the future nature of manpower since the quality of the local product depends on the quality of imported manpower.

Given the present level of educational and manpower development in P.N.G., it is perhaps desirable that future educational investment give emphasis to educational product quality. If the educational system is localized, the process must be placed on a solid, dependable basis [8, p. 19].

This is where the problem of rapid localization enters. In the first place, such growth in local centers will force educational institutions or government to curtail the use of imported manpower services, and have increased demand for local staff. The latter are presumably less trained and less qualified, otherwise they would have been employed even without expatriates. As a result, forced replacement of trained personnel by less trained local staff will constitute a learning loss to the student community and a welfare loss to the country [8, p. 22].

Secondary, existing educational institutions will have to expand to meet increased demand. Under full employment conditions this means a resource diversion presumably from alternative channels of investment. Otherwise resources would have been invested to expand educational facilities in the first place, before forced curtailment of overseas manpower consumption. This expansion of educational facilities means a loss in educational efficiency and in national production [8, p. 23]. Thus the goals of rapid localization and quality education may conflict despite the fact that emphasis on quantity means mass education and getting people used to the idea of change, thereby achieving development goals.

### CONCLUSION

In conclusion the planning ideology must be subordinate to the state ideology. It is not easy to have a clear beginning vision, a sense of perception of change. The element of conflict between contributing and competitive forces lies at the heart of the dynamics of modernization and development. This is why development goals are consistently inconsistent. The Eight Point Plan is no exception. Priorities have to be determined. It is important that planners and policy-makers in P.N.G. are aware of these conflicts. This will help to implement the Eight Point Plan, in which the crucial economic choice has been made of raising present consumption over future income prospects. The present level of consumption in P.N.G. is so low that it is better to raise current consumption even at the cost of a slower future growth rate.

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