

How The  
INTERNATIONAL  
DEVELOPMENT  
BANK  
Will Work

**IDB**

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# How the INTERNATIONAL DEVELOPMENT BANK

## Will Work

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NEW YORK, May 16 — Unless the maddened pro-Rockefeller forces trigger general thermonuclear holocaust before Summer, probably that Rockefeller machine will shatter in the manner of a burst dam. At that point, we must mobilize all our attentions and efforts to the second deadly threat of this period, the impending total collapse of the capitalist sector of the world's economy.

At that point, two interconnected actions are imperative:

(1) The declaration of a commitment to sweeping financial reorganization of the capitalist sector's world monetary system, involving an orderly process of debt moratoria and the establishment of an institution such as the proposed International Development Bank (IDB).

(2) Immediate commitment to enact, within each national sector of the capitalist world, these measures of emergency financial-reorganization legislation required to facilitate immediate economic recovery in conjunction with IDB efforts.

Since weeks and months would be required to negotiate and initiate the various essential detailed programs of the IDB and internal national-economic financial reorganization, the possibility of preventing immediate collapse will depend upon the affirmation of *credible* statements of commitment on both of these interconnected points.

*Essentially, a political declaration concerning those aspects of international trade we jointly intend to support and honor creates de facto interim credit for those economic and related financial activities whose current maintenance is indispensable.*

### ALIGNMENTS OF FORCES

Provided significant political forces within the USA make such a prompt declaration — by late June or early July, the following other agencies may be reasonably regarded as either politically disposed to such declarations or situated in objective circumstances in which they are impelled to quickly join in endorsing such statements of policy commitment.

In the Third World generally, the Arab sector is strategically crucial.

In the Arab sector itself, Algeria and Iraq have already taken leadership in seeking international agreements for development policies along these general lines. The Arab Gulf States, Saudi

Arabia, Egypt, Lybia and other Arab states would rapidly be unified around such an initiative.

Endorsements could be obtained rapidly from Sudan, Guinea, and so forth. India and Bangladesh are ready to weigh such commitments, and Pakistan is objectively situated to want such arrangements, including arrangements for a general program of subcontinent development.

The Soviet "Open Call," statements by Soviet spokesman Ivanov at a recent meeting in Italy, and other indications, attest to Comecon readiness to participate.

The Democratic Republic of Vietnam, the Revolutionary Government of South Vietnam, the government of Laos typify intermediate, politically important cases of commitment to such policies, between Third World categories generally and the special categories of industrialized states with socialist constitutions. Cuba obviously fits into this same category.

The proliferation of support into other Third World regions, such as Indonesia, Burma, key sections of black Africa, and key Latin American nations, depends upon the influence of the spearheading forces we have already indicated and broader expressions of support from the industrialized capitalist sector.

Within the industrialized capitalist sector, the following outstanding alignments are most notable.

In the Federal Republic of Germany, the industrially-based faction of the Christian Democratic Union (CDU) would be objectively in support of such arrangements, and would consolidate its hegemonic position with respect to the remainder of the CDU and the state bureaucracy of the Federal Republic of Germany. The emerging *new* principal political competition to the CDU faction of Herr Stoltenberg and Company would be a coalition of left-wing SPDers, the West German Communist Party (DKP), and forces rallied with the assistance of the European Labor Party — since the SPD's other factions would have lost hegemony through the self-discrediting Rockefeller alignment of the Brandt-Schmidt-Wehner coalition. This means that the principal political forces emerging in the FRG would be for an IDB-type policy.

In France, the powerful French Communist Party (PCF) and the CGT trade-union confederation would be in support of such policies, together with its principal pro-capitalist opposite numbers of regrouped Gaullists.

Great Britain has no alternative to such measures, and those

anti-Rockefeller pro-capitalist and labor forces in Britain identified with such remedies would secure hegemony at the expense of other factions.

In Italy, a massive revolt against the present Italian Communist Party (PCI) leadership is already in process. According to assessments of key secondary PCI leaders, from half to three-quarters of the PCI membership is on the verge of expelling Berlinguer, Amendola, et al. from the organization. There are also pro-capitalist factions prepared to move into any opening created by discrediting of the Rockefeller-allied forces within Italy. A West German and French initiative in support of IDB-type policies would be quickly hegemonic in Italy.

All these potentialities have either already surfaced or are building up powerfully now just below the surface of apparent political tendencies.

In the special case of Japan, a collapse of the dollar means that that nation's export levels immediately fall substantially below levels needed to provide essential imports for the internal economy itself. China cannot yet provide a market on the scale Japan's economy requires; only massive commitment to economic cooperation with the Third World — especially the Asian subcontinent, Indonesia, and the Arab sector — supplementing cooperation with the Soviet Union and Australia-New Zealand, affords Japan an acceptable alternative to catastrophe. Japan would be objectively impelled to support an IDB policy.

### THE SPECIAL CASE OF ISRAEL

These proposals obviously intersect the pending Geneva conference of Israel and Arab representatives. With an IDB policy in the wind, the pro-peace faction of the Mapai (presently grouped around Abba Eban) should become hegemonic. Through (principally) Soviet good offices, the Israelis and key Arab states could readily agree on *durable terms of continued negotiation* concerning the Palestine Question within the context of immediate firm agreement for cooperation in development policies.

With a collapsing international monetary system, the former aversive role of Israel in the Arab region loses its material basis. Jewish survival — both militarily and economically — in the Near East becomes a matter of seeking direct cooperation with the Arabs. The Jew in the Near East now obtains the objective

basis for survival in his role as a bearer of much-needed skills of industrial technology and science. To the extent that the Near East Jew contributed to the solution of Arab peasant poverty, and to the development of an Arab industrial working class, it would soon become the Arab who turned into the best defender of Jewish survival.

This, as we have noted before, is encumbered with a quarter-century of aggravated bitterness. Subjectively, the full realization of such goals is not so easy. Objectively, however, the potential for such a solution is overwhelming. Within such a policy framework, the Near East Jew will tolerate no continuation of keeping any section of the Arab population in oppressed backwardness; this provides the positive basis for finally settling the Palestine issue to the satisfaction of Jews and Arabs generally, including of course, the Palestinian Arabs. In such circumstances, subjective enthusiasm for agreements will inevitably drag along after determination to seize the objectively imperative alternatives. However, the objective basis for such alternatives is overripe — and the IDB policy provides the essential context in which to realize the potential.

This overview of the developing situation emphasizes two features of the task before us. Immediately, it demonstrates that a majority of the world's population is currently objectively at the point of supporting something like an IDB proposal. It also indicates the politically heterogeneous composition of forces presently or implicitly oriented to such an undertaking. Under such circumstances, we are obliged to provide those variegated forces with advance notice concerning the principal essential features of the agreements which must be reached by this early Summer.

### **THE IDB AS SUCH**

No competent professional financier should find it difficult to understand the merits and workings of all the principal short-term features of the International Development Bank. It is merely necessary that we appropriately identify those points. It is the longer-term perspectives and policies of the Bank which go beyond the financial specialist's education and experience. On that aspect, we are obliged to clarify the essential scientific points.

In the view of the U.S. Labor Party generally, our concern to inform financial specialists on these points is essentially that of competently instructing specialists who will function de facto as employees of working people. *From our standpoint*, financial specialists will be functioning as administrative technicians assigned to conduct the day-to-day business of our centralized instruments of credit and monetary circulation. The pro-capitalist supporters of an IDB policy may envisage the role of the financial specialist differently, of course. However, here we are presenting the situation and proposal from our standpoint. We leave it to the pro-capitalist supporters of an IDB proposal to argue the policy from their own standpoint.

From our standpoint, it is essential that these prospective employees of our banking system clearly understand the practical implications of the policies by which their performance is to be governed.

Formally, the IDB comes into existence in a manner analogous to the effective financial reorganization of any major bank being rescued from illiquidity collapse. A new bank is created to continue the essential operations of the old, while major categories of unpayable carried-forward indebtedness are placed in a moratorium "deep freeze" and negotiations for future liquidation of that debt conducted separately from day-to-day operations of the new institution.

There are two general approaches to such a financial reorganization. In one approach, which we are rejecting for the problem before us, the administrators strip the operations of the illiquid bank down to a hardcore of essentially sound categories and ranges of activities — an austerity policy of financial "debridement." In the second approach, which we are applying to the IDB policy, the object is to vastly expand the operations of the reorganized bank beyond the scope of the bankrupt predecessor, by focusing the activities upon development policies essentially free of the policy errors which led to the collapse of the former entity. The second approach is analogous to the case of the bankrupt manufacturing firm which is successfully reorganized for expanded operations by introducing a superior set of products to its existing productive capacities.

Our core policy is this. The worldwide material preconditions from agricultural, mining and manufacturing production are essentially sound. It is only the debt-ridden financial superstruc-

ture which prevents those potentialities from being realized in the form of rapidly expanded levels of output at progressively reduced net social cost of production per unit of output. In short, we reject the "Zero Growth" and "Limits of Growth" chimeras as dangerously disorienting fantasies concocted by charlatans and widely puffed by ignorant public relations agencies.

To this end, we have already identified — in consultation with some of the world's leading professionals and relevant governmental agencies — several major specific development projects which can readily (over a five to ten year period of development) yield a massive increase in the output and social-productivity of world agriculture, and thereupon premise the infrastructural basis for massive industrial development. We have similarly determined the feasibility of controlled thermonuclear reaction technology within the horizon of such development programs, such that no long-term "energy crisis" could exist except through massive incompetence by leading agencies.

Those two primary bases for development warrant a massive increase in levels of industrial output from the presently industrialized sectors. The realization of those combined objectives demands supporting activities in the form of both capital development of productive capacities and increasing the social productivity of the general population through improvements in material consumption, leisure and educational opportunities of households.

Hence, credit issued for the realization of such programs is secure and liquid, since the margin of total production obtained through the mediation of credit will significantly exceed the margin of credit issued to effect such production.

Although the decisive interconnections determining such results are international, the present mediating form of economic cooperation to such international ends is the form of de jure national economy. Moreover, the national economies principally to be considered are apportioned among states with capitalist and states with socialist constitutions. Hence, although the objectives to be realized are global, the mediation of the process of reaching those objectives must be treaties of economic cooperation to such ends among participating groups of states.

To maintain a stable international trade as the means for implementing those treaties (rather than an awkward "barter agreement" system), such treaties among states and groups of

states must be directly incorporated into a single international credit agency, through which world commodity prices can be rationally pegged to the exchange values of principal commodities in terms of the most stable major currencies.

The proposed International Development Bank is therefore essentially an international treaty organization of the participating national economies (states). It acts as a planning forum for the negotiating of extended treaties of economic cooperation, and functions as an international rediscount agency in connection with those letters of credit and bills of exchange in international trade authorized by treaty agreements.

## **ROUTINE BANK OPERATIONS**

Each treaty negotiated within the purview of IDB operations directly subsumes corresponding "master letters of credit." For each unit of bookings and deliveries subsumed by such master letters of credit, specific letters of credit are automatically processed through the bank as the ultimate rediscount agency of international trade. Bills of exchange against those letters of credit are similarly routinely processed.

The global effect of this operation is to issue credit to the account of the producer and purchaser national sectors. This IDB international central bank credit provides the means for issuing domestic credit to relevant specific producers and purchasers within the national economies affected.

Hence, provided the level of aggregate international trade is sufficiently high, the rates of production in all participating sectors are raised to levels above those prevailing in the high-points of the pre-depression period.

Provided credit is restricted to commodities of the classes directly relevant to development and at non-inflationary prices, the aggregate operations of the bank are in balance except for one major category of long-term credit balances held by the advanced sector against the development of the developing sectors. Provided that this long-term credit does not exceed the aggregate exportable social surplus product of the industrialized sector, the enlargement of such balances has no adverse effect on the industrialized sector. Rather, from traditional banking viewpoints, this mass of credit has the form of 10-to-15-year investments in the developing sector, under the conditions in which

initial repayment is postponed to a forward date of maturity 10 or 15 years hence.

Other imbalances among industrialized nations are settled in an ordinary way, through creating gold-denominated reserve balances in the IDB itself. Imbalances developing between various developing-sector nations would be, in part, settled in an ordinary way, or would be absorbed within the general long-term credits issued to the developing sector as a whole.

### AN ILLUSTRATION: JAPAN

There are two approaches to be taken to the long-term credits issued. The case of food-short Japan provides an excellent example of one problem.

Among most industrialized nations — North America, Europe, Australia, New Zealand — the domestic potentials for food production within regions as a whole are more than sufficient to meet domestic or regional needs. In North America, we have our famous grain belt as well as other agricultural potentials elsewhere in the region. Europe and Northern Asia (the USSR) has a magnificent grain belt, requiring only sufficient application of industrial technology to satisfy the wants of a growing population. In Japan, pending the hydroponics techniques of the age of fusion technology, this is not the case.

However, one major portion of Asia, the subcontinent, has the potential of feeding a population equal to the entirety of today's human race. Not overlooking the work to be done in the Mekong region, Indonesia, and so forth, if Japan can perform a major role in developing the potential of the Brahmaputra-Ganges region in particular, it can assist that region to generate a food surplus. With general concentration on such opportunities, significant results would appear within five to six years and be substantial in the period of 10 to 15 years. This can be restated: by aiding India, Bangladesh, Pakistan, etc., today, Japan's industry can contribute to the nourishment of Japan's next generation of children. That is a case in which the meaning of IDB long-term credit is clear and close to traditional views.

Yet, in the more general view of long-term credit, there would be no *objective* problem in issuing most of that credit as outright development grants. If such a grants policy were adopted, it would be no sentimental act of charity or otherwise economically

unsound. If we succeed in bringing a major portion of the population of the developing sector up to a level of social productivity comparable to the advanced sector within 10 to 15 years of development (aided by fusion technology), the benefits of this result to the advanced sector are so enormous that we should then require no repayment for past aid.

The problems — the purely mental problems — which seem to arise in connection with such thoughts are the result of attempting to interpret global economic processes in the arbitrary terms of outlived concepts of national economy.

To illustrate: Full expansion of U.S. and Canadian industrial and agricultural potential will require the importation of approximately five million Mexican workers and their families (20 to 25 million persons) into the U.S. and Canada during the next five years! To realize the benefit of this labor, we must house, educate and otherwise train it for modern forms of industrial technology. As trained labor-power, these Mexicans will contribute substantially to the total social surplus. Everyone in the U.S. — including those Mexican workers — would thus be richer as a result of the "development" effort surrounding their assimilation into industry.

Yet, expenditures to the same effect for Mexicans in Mexico would pose the heated issue of "How will the Mexicans repay us?" Obviously, the problem is purely a mental one — the same thing done within national borders is seen differently than if it were done to the same essential resulting benefit *to us* outside those borders.

It is our view that most of the development credit never need be repaid. However, for those who wish to be sticky about the point, we assure them that the developing sector would have little problem "repaying" after 10 to 15 years of serious development.

The issue is not a small one. By 1979, the U.S. sector alone could readily — and should — export the equivalent (in 1973 dollars) of approximately \$200 billion annually in long-term development projects. The rest of the industrialized sector should add about \$100 billion to that total. To get some comparison figure, consider the total military budgets of NATO and Warsaw Pact countries during the past decade. Considering the feasibility of eliminating the military budgets under IDB "detente" arrangements, the amount proposed is obviously not "horrendously large." Yet, otherwise it is a whopping sum. Against this, we have the im-



mediate prospect of approximately doubling total U.S.-sector productive output within a very short period.

Taking such levels of aid over a 10-year period, we are considering long-term development in the order of several trillions of 1973 dollars. Serious people should find the size of that investment ironically reassuring. Obviously, development on that scale should produce major results in the developing sector. The fact that we are approaching the problem in those terms also assures people generally that we are proposing serious development, not some harebrained "shoe-string" gimmick. In fact, that is approximately the magnitude of the effort needed to produce urgent results at the pace circumstances require.

## THEORY BEHIND THE BANK

The kernel of the International Development Bank (IDB) will probably be a three-way basic treaty initially negotiated among a group headed (probably) by Algerian Prime Minister Boumedienne, a Comecon plenipotentiary body, and a delegation representing various European and North American countries and Japan.

The suggestion of Prime Minister Boumedienne is not idle or speculative. Boumedienne is currently the foremost delegated spokesman of Arab (and some other) OPEC countries in attempting to induce Western Europe and North America to accept a three-point agenda covering energy, other raw materials, and food. He is also a leading spokesman of the so-called non-aligned nations group. Because of the key position of the Arabs in the strategic features of current energy negotiations, and therefore as leading spokesmen for the cause of the Third World generally, the first thought of any intelligent representatives of the industrialized sector would be to propose to seriously reopen the agenda discussion with Mr. Boumedienne et al, as the path of least resistance for getting the maximum number of the right Third World forces' representatives around the negotiations table.

The inclusion of the demands of such countries as Sudan, India, Pakistan, Bangladesh in the discussions would require the addition of a fourth point to the previously proposed three-point agenda. The fourth point would be "development."

It is our estimation — after consultations with representatives

of various "Third World" governments and political forces — that the only important technical problem they would confront in attempting to negotiate the issue of "development" would be a controllable conception of what represents measurable performance for purposes of treaty negotiation. Some weeks past, we committed ourselves to detailing our solution to that problem, which promise we keep in this present setting.

*Figure 1* is supplied to illustrate the following discussion of the theory of development. We introduce the hard kernel of the theory of long-term bank operations by prefatory qualifying remarks concerning, first, the relevant analysis of population characteristics and second, the connection of those characteristics to the economic process as such.

## POPULATION CHARACTERISTICS

The history and pre-history of the human species is properly summed up as follows: In the Pleistocene period, the period during which our human genetic stock emerged, our ancestors had an ecological population potential in approximately the same order — millions — of magnitude as a gifted species of baboon or ape. Since then, the human population has risen at an *overall* accelerating rate of growth to three and three-quarters billion persons, with a population potential — on the basis of presently existing or emerging technology — of two or more tens of billions of persons.

During that ascent, our species was repeatedly confronted by absolute "limits to growth" of the population. If one applied the method of argument used by the proteges of John D. Rockefeller III to any period of human history or pre-history, it could be "proven" that *the earth has always been overpopulated with people!* However, as history itself shows, Zero Population Growth conceptions have always been products of charlatanry.

The real problem of "over-population" threats has always been this. Any existing mode of technology always defines certain aspects of nature as "resources." These so-defined resources are always relatively finite in availability. Beyond a certain point of cumulative consumption, still remaining such "resources" are of a relatively marginal quality in quality or accessibility. However, this problem has been solved repeatedly, by the advancement of new technologies, with a resulting radical redefin-

ition of resources. The discovery of animal herding and agriculture are as exemplary of a revolution in the definition of "resources" as the break-throughs into the bronze, iron, or fusion-technology ages.

The overall effects of every general advance in technology and culture include a significant increase in the population potential and a tendency for acceleration in the amount of energy per capita consumed both in production and in households. These advances are also inseparably associated with qualitative shifts in what we term "population characteristics."

Let us leap ahead in our account to consider a special problem of today, the so-called over-population of India. In the relatively primitive (i.e., labor-intensive) communal mode of village agricultural production, there is an emphasis on child labor coinciding with high mortality rates. The result is that in households with the largest number of children, the per capita income (and survival expectancy) is relatively higher! In this circumstance, without altering the culture of the rural agrarian population, displace a considerable portion of it into urban slums.

However, in industrial families, the survival of the individual depends upon a higher development of culture, a prohibition of child labor, and a longer period of maturation of the individual to economic maturity. The child costs more in both money and in cultural effort per capita by the adult population. In this instance, a lower household fertility yields a higher level of income and survival per family member, provided sanitation, nutrition and so forth properly reduce the mortality rates.

As we shall indicate, India today is not overpopulated by virtue of the size of its population as such. It is apparently overpopulated because it is a looted agrarian culture with all the burdens of the industrial age but with too few of the compensating advantages. The argument that the subcontinent could not feed its growing population is a charlatan's nonsensical assertion; in fact, the subcontinent, properly developed in terms of existing technologies, could feed the present world population!

To resume our account. It is not necessary to elaborate here the whole span of development of population characteristics. It is sufficient to know that the specific points we have to make concerning post-14th century European society are exemplary of the same principles governing all preceding human cultural develop-

ment. So, as we make summary statements in the form of a broad generalization now, we refer immediately to the period of European and other capitalist development from the 14th century to the present, but also insist that the principles so illustrated for immediate applicability are exemplary of the general case.

To determine the relevant population characteristics, we first divide the entire population (of industrial society) into three principal classes: the agrarian population, the working class, and other classes (capitalists, petit-bourgeois strata combined). Historically, the modern development of agriculture is the result of the benefits of industrial development upon agricultural technology. This connection is elaborated as an increase in the social productivity of agriculture, reducing the proportion of the total population required to produce the nutritional requirement of the same total population, creating an enlarged industrial population from surplus agricultural populations while reducing the effective social cost of industrial labor by cheapening the social cost of nutrition.

For this development to proceed, the populations involved must develop the cultural capacity to assimilate more advanced productive technologies, for which literacy is an appropriate exemplary parameter. This requires a longer term and cost of maturation of the new individuals of each class. This reduction in child labor requires an increase in the longevity of the individual, requiring higher standards of sanitation, nutrition, and leisure. Thus, the process of development demands (1) an increase in the industrial population relative to the rural population, (2) an increase in the term of maturation, (3) an offsetting increase in longevity. All of these require a substantial increase in the per capita cost of producing the individual from the standpoint of the "consumption market-basket" of the preceding period. This therefore demands a tendency for acceleration of the effective energy throughput per capita for both household consumption and all modes of production.

Unless such policies are pursued, a crisis of overpopulation will constantly exist for all levels of population, in fact, *becoming more acute as population levels decline significantly*. The reason is that the continuation of any population in any relatively fixed mode of technology means a convergence upon the relative limits of resources defined by that technology. E.g., a turn away from capital-intensive forms of industrial and agricultural employ-

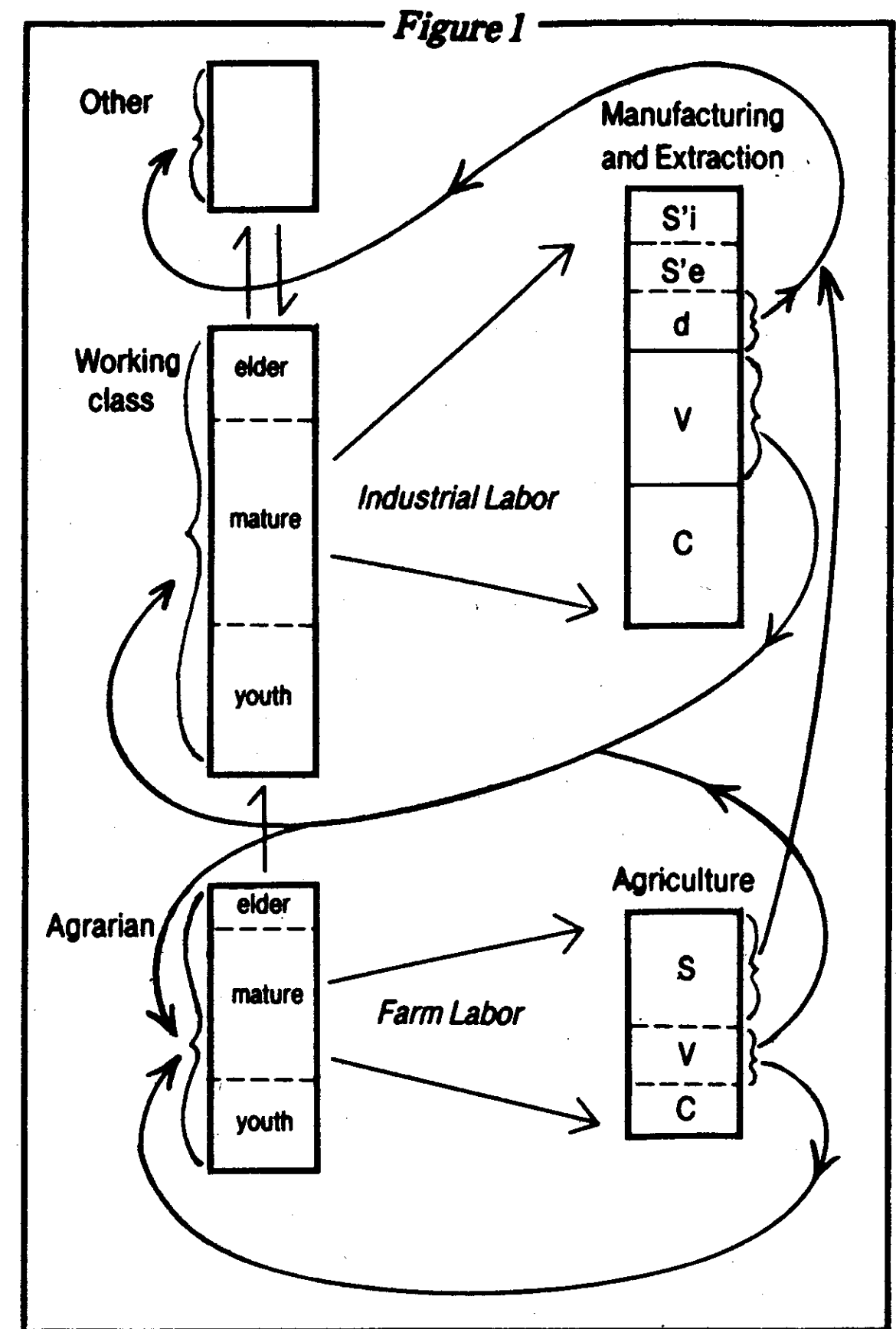
ment toward more labor-intensive forms aborts development, directly increases the social cost of producing an individual, and prevents society from superseding relatively finite resource limits. The more the population declines under such labor-intensive "Zero-Growth" programs, the more acute the resource limits become.

The third population category is a mixed case from a policy standpoint. As a category, this population represents non-productive "overhead" costs to society, which ought to be minimized on that account. However, exemplified by scientists, engineers, teachers, physicians, this category includes specialist activities of the form designated by Marx as *universal labor*, for which science is the epitome. It is the development of science which immediately determines human potential for positively shifting the apparent "resource" boundaries. As society develops, this requires an increasing ratio of scientists and engineers per capita of combined industrial and agricultural labor.

### ECONOMIC CHARACTERISTICS

*Figure 1* depicts labor as the output (right side of the population bar) of the mature segment of each population, and thus as input to the corresponding production bar. The consumption upon which the existence of the population households depends is an input (left side of the population bars) from the output of production (right side of the production bars).

There are two production bars depicted, industrial and agricultural. On the input side, each bar represents simply the totality of the productive labor consumed. The segments of division within each bar are determined by qualities of output of production. In the agricultural bar, V represents the portion of total agricultural output consumed by farmers and agricultural labor, C represents seed, fertilizer, farm equipment, and so forth, S represents the social surplus of agriculture. In the industrial bar, the same general significance of the symbology applies. C is the proportion of total output consumed to maintain the equipotentiality for production of plant, equipment, machinery, materials, energy. V is the proportion of output consumed by households from which industrial labor is to be recruited. S is divided into three sub-segments: "d" is the proportion of output consumed by capitalists, petit-bourgeois, either as household



consumption or as materials and equipment of their occupations (e.g., office buildings, computers, jet military aircraft, etc.).  $S'i$  is the portion of social surplus invested in expanding the production of that national sector;  $S'e$  is the portion of social surplus from that national sector exported as investment or aid.

The theoretical treatment of these categories is given in detail in *Dialectical Economics*, in which the determinate character of the relative magnitudes is demonstrated.

For description of the relationships to be considered, we derive the following expressions:

$$\text{For agriculture: } S/(C+V)_a$$

$$\text{For industry: } (S'i+S'e)/(C+V)_b$$

Our object is to increase both ratios, while increasing the scale of the population corresponding to  $b$  at the expense of the population corresponding to  $a$ .

However, this is accomplished by increasing the per capita value of  $C+V$  for both  $a$  and  $b$  in terms of lists of consumption in the preceding period. In short, we must increase per capita household and capital consumption while reducing the social cost of such total consumption! The means for accomplishing this result is advances in the technology of production in both agriculture and industry.

Since development must absorb the costs of relatively marginal resources, the rate of development which effects a constant rate of growth of the ratio  $S'/(C+V)$  must be the result of technological innovations which have an apparent "instantaneous" tendency to accelerate the growth of the ratio  $S'/(C+V)$ . Hence, the central principal of development — and, hence even continued human existence — is what we term *negentropy*.

Where is this "factor" of negentropy located? It is located in *self-development of the cognitive potentialities of the scientists, engineers, and industrial and agricultural workers*. It is easily argued that the source of the negentropic advances in technology of production is the creative innovation of scientific work. It is more sophisticated but not less important or real that the possibility of the general *assimilation* of new scientific discoveries for productive practice depends upon advances in the cognitive competence of engineers and workers. It is also less true that

scientists do not develop out of test tubes, but reflect the developing cognitive ground prevailing in the general populations from which they are recruited.

This is the meaning of the conception of *labor power* in Marx. The source of the negentropy upon which the capitalist system in particular depends for its past accumulation is the cognitive powers of employed labor to assimilate and effectively realize new technologies. It should be readily seen that the notion of  $S'/(C+V)$  as a self-extending and self-developing magnitude is nothing but a notion of negentropy. Without new inventions and the power of labor to realize such new technologies, the rate of profits determined by the social ratio  $S'/(C+V)$  must fall to zero:  $0/(C+V)$  and capitalist accumulation would not have existed except as pure looting of nature and conquered populations.

Thus, in the final analysis, development means rising ratios of  $S'/(C+V)$ , which are the result of increases in the quality of productive technology, made possible by science and engineering and dependent in turn on the constant advancement in the cognitive powers of employed productive labor. This development in the cognitive powers of labor requires increased longevity, greater leisure, improved education, emphasizing an increase in the profundity of education, prolonged maturation of the average new productive individual, improved housing, etc.

Those general observations being true, the problem of development must be made concrete. What standards of sanitation, nutrition, and so forth are required to realize a certain quality of technology? What specific kinds of scientific and engineering accomplishments have relative priority in terms of their realizable benefits? and so forth.

## THE CONCRETE SITUATION

It has been established in other locations that provided we make an effective commitment to "brute force" development of CTR technology, the human race confronts no meaningful categorical limits to availability of either energy resources generally or any essential raw materials in particular. Setting 1985 as the readily feasible target date for operating CTR facilities, and assessing existing energy and raw materials resources,

we face no qualitative problem for the expansion of our useful industrial capacities to the limit of possibilities.

That taken into account, our immediate tasks for development are so clear-cut as to be elementary. In the developing sector generally, we have three major areas for massive agricultural development in addition to a number of small-scale fruitful opportunities. At the top of the list, from the standpoint of immediately accessible substantial results, is the Rio de la Plata region of Argentina, Uruguay, Brazil in which straightforward methods (fertilizers, tractors, etc.) will quickly yield major increases in output, immediately buttressing the social infrastructure of a sector ripe for massive development of one of the world's richest agro-industrial complexes. More stubborn, but ultimately enormously fruitful as well as immediately urgent, is the riparian and adjacent regions of the Asian subcontinent. The third, the potential breadbasket of Africa, is the Sahel. Both the latter two represent massive engineering projects as well as straightforward agricultural technological development. Extending the policy tailored around these three regions to other areas appropriately, we immediately have the basis for a major program sufficient to generate a worldwide production boom over the next five to ten years!

The concrete point is that the first step to solving the problem of Third World development involves nothing sophisticated from the standpoint of the lessons of the past four hundred years of European and North American capitalist experience. An abundance of cheap, balanced nutrition is the classical means for creating the infrastructure of rapid industrial development. In the three indicated areas, and in a number of smaller special cases, we have accessible a potential for agricultural development which, in terms of existing industrialized agricultural technology, is far more spectacular in its present potential short-term results than the history of the North American grain belt.

Fertilizers, hydraulic engineering, tractors, and agricultural equipment, together with biological work on seed stocks, and so forth, can effect a significant leap upward in the per hectare and per capita productivity of agricultural output with a *relative minimum* of initial development of the cognitive levels of the agricultural population. Provided we utilize that source of major gains in total output to generate the infrastructure for industrial

development, over approximately a ten-year period we can utilize that one-shot agricultural development process to leap out of the present mess of underdevelopment, meanwhile expanding the output of the industrialized sector to new levels.

The social surplus generated from agricultural development must be largely plowed into housing, sanitation, education and related contributions to the desired shifts in population characteristics, with the specific goals of raising the cognitive levels of agriculturalists and also preparing future surplus agricultural (rural) populations for qualifications as semi-skilled and skilled industrial labor.

This process must be accompanied by the rational development of industries in the developing sector. A selection of industrial centers must be adopted, such that these centers together with expanding "guest-labor" employment opportunities in the advanced sector become the principal places into which we assimilate urban labor during the first decade of development. *The object is to avoid wasting industrial infrastructure costs and to develop industries in the dispersion and sequence of development in which they represent the optimal immediate contribution to general development and to the effective assimilation and development of industrial cadres.*

For example, a meat-producing region is a hides-producing region, which suggests tanneries and footwear manufacturing, both industries well suited to assimilation of new industrial cadres. Local construction industries are obvious candidates for each region, whereas steel mills may or may not be.

Initially, traditional national development outlooks may tend to cause nations to exaggerate the number of local industries each national economy should have. Provided rational economic relations exist, it is better for a national region to have fewer good, productive industries than the highly variegated spectrum of semi-efficient industries which only suggest relative independence of foreign imports. Under conditions to date, there are powerful reasons why developing nations have tended to emphasize relative self-sufficiency respecting manufactured needs; we must remove the "incentives" for such wasteful practices and on that basis prompt participating national sectors to redefine the problem in terms of maximum regional economic yield per unit of capital and labor employed.

As the world ought to know, we face a critical shortage of productive capital, which will not be remedied if we foster major redundancies in creating industries or industrial infrastructures. We need trillions of 1973 U.S. dollars of capital for development and we are only on the verge of mobilizing several hundreds of billions.

The work of the Labor Committees in producing papers on specific development subjects is an exemplar of the much more expanded effort required to detail the concrete programs in full. However, there already exist a number of major projects for each national sector which have unquestioned merit and priority; while we get those under way, we must quickly sort out the rest.

## MEASURING DEVELOPMENT

If, as is necessary for global development, the developing nations exploit their petroleum, natural gas, coal, and mineral raw materials resources to the extent required for industrial expansion in both the industrialized and developing sectors, how shall we determine both the price of those resources and the compensation for the implied depletion of such assets?

*Without a "brute force" commitment to development of CTR technology, there is no price level or forward depletion compensation which could be considered "equitable."* The general basis for treaty agreements covering prices and depletion compensation is fundamentally (1) a commitment to applicable CTR technology installations proliferating from 1985 onwards and (2) a commitment to bring those regions up to the level of employment of CTR-oriented technology by the 1985-1990 period.

It must be emphasized that unless there is an accompanying commitment by all treaty signators to "brute force" development of CTR technology, all other agreements on prices, development and so forth are ultimately unworkable and worthless. If we largely depleted existing known resources by 1990 without meanwhile developing a major new source of energy and raw materials, most development occurring during the 1975-1990 period would be transformed into unusable rusting plant and equipment. The proposals of "solar energy" and boiling water or breeder-reactor nuclear plants as alternatives, "geothermal"

development, etc., are charlatany from the standpoint of both the energy required to yield one kilowatt of output capacity and the amount of total energy which could, in fact, be provided by those means. Only CTR development can assure continued human existence beyond this century.

*Hence, general agreement on "brute force" CTR development for 1982-1985 target dates for initial operating facilities must be the first term included in all general treaty agreements for development.*

The solution to development problems is not found by cartel agreements which set extraordinarily high prices for petroleum and other primary materials exported from the Third World.

It would be a wild fallacy of composition to argue that the October, 1973 OPEC agreements caused the present depression. The depression had been developing since at least the Winter of 1967-1968, and had been accelerating toward monetary collapse since the Summer of 1971. OPEC agreements did not cause the unprecedented general illiquidity ratios which have accumulated over more than a quarter century, especially during the past decade. OPEC agreements merely accelerated a process of monetary disruption, slightly aggravating a crisis which would have quickly developed into present catastrophic proportions even had there been no quadrupling of world-market oil prices.

Nonetheless, the present OPEC prices are both unwarranted and tragically self-defeating. Similar approaches to raw materials cartels would be similarly unsound. The present world glut of petroleum, combined with massive cut-backs in well production, show a tendency for OPEC nations' aggregate net accumulations to fall below the levels prior to October 1973. Excessive prices for energy resources and other primary materials tends to disrupt and so lower the rate of industrial development generally, a constriction inevitably affecting the Third World in general most cruelly.

This argument does not overlook the inequity of traditional raw materials prices and related income to Third World sectors. Equitable price-level formulas should be negotiated and approximately fixed by treaty. Prices should be calculated on the basis of modal levels of price of production of each such commodity for world production of that commodity as a whole. Furthermore, the determination of the applicable calculations of

price of production for Third World primary materials must be based on advanced-sector standards of wages for labor employed in Third World production. Equity signifies that the element of cost of production allocated for labor costs in the developing sector must be based on the standard labor costs per unit of output in the advanced sector.

Against this, it might be passionately and correctly argued that Iraq, for example, uses its capital accumulation from petroleum revenues for both internal development of agriculture and industry and for comparable forms of economic development assistance to other Third World nations. A more balanced picture of OPEC practices is found by tracing flows of funds through the operations of the "Seven Sisters" and by considering cases such as Kuwait. In both latter instances, additional capital accumulations from OPEC revenues have not flowed so much into useful development, but have been foolishly invested speculatively or in otherwise merely feeding the speculation and illiquidity-cancer-ridden financial structures on the verge of depression collapse. We need agreements which have the effect of Iraq's use of capital accumulations from petroleum, but without the countervailing irrationalities which are unfortunately the more general OPEC-"Seven Sisters" picture to date.

This does not mean that Third World countries should not exploit their national and regional control of primary resources as "bargaining chips" to force industrialized nations to the negotiating table. *Unless a rational set of development agreements is reached, these nations are left with no alternative but to utilize any economic weapon available for getting some part of what they want.* We insist that the only form of workable, rational agreements is treaties which set primary commodities prices according to price-of-production criteria, provided that the industrialized nations also commit themselves to corresponding development programs.

What the Third World must obtain from these development agreements is a process of shifting its overall population characteristics through the following steps.

(1) Levels of per capita nutrition available in the order of 3,500 calories per day with appropriate levels of total and animal protein consumption included.

(2) Consequently, apart from short-term food aid from the developed sector, the initial emphasis must be on increasing the yield per hectare, increasing the number of hectares of arable land cultivated, and decreasing the average amount of labor-time required per hectare. The means for accomplishing these results are the development of the agricultural output of the industrialized nations and the use of industrial technology — fertilizers, drainage, irrigation, desalination, tractors, etc. — to effect a transformation of developing sector agriculture.

(3) Housing, sanitation, education, leisure-rates for the entire population, increasing the longevity of the population, and increasing the period of maturation of young toward industrialized sector standards.

(4) The assimilation of households of labor available to provide industrial manpower either into employment in industrial-urban foci of the developing sector or guest-labor employment of workers of resident households in the industrialized sector.

(5) The development of centers of industrial infrastructure in selected foci of the developing sector. The near term development of industries, especially consumer goods industries, appropriate to the circumstances and to the needs of local populations.

These general terms of development can be summed up as representing both a favorable advance in the population characteristics and a provision of the material preconditions of production to realize the increased productive potentialities of that population. What is decisive is not the absolute level of progress attained at any time, but rather the manifest rate of development of both the population and its realized productive potentialities.

This means that the construction of a large number of office buildings and infrastructure for housing office workers in itself does not represent a satisfactory development performance. Nor does the siting of a warehouse, factory, etc., to "take advantage of cheap labor" represent development. The measure of development is the general rate of improvement of the population and productive employment of the population in general.

### **AN EXAMPLE: U.S. FOOTWEAR**

Among the tragic curiosities one meets around Washington,

D.C. currently, there is the "footwear lobby." This group is concerned to block imports of foreign made shoes, on the specious premise that those imports are depriving U.S. footwear workers of employment. The truth is quite contrary to the arguments of those lobbyists, involving points directly relevant to the fallacy of "cheap labor."

The prototype of a good wearing shoe is a man's leather-upper Goodyear Welt. The first thing to do analytically in this connection is to price a good quality man's leather-upper Goodyear Welt as a percentile of the modal weekly take-home income of a skilled or semi-skilled trade-union-waged worker. Compare the prices of comparable quality Goodyear Welts as a percentile of weekly take home income over the past three-quarters of a century.

Next compare the incomes of skilled and semi-skilled U.S. shoeworkers with mean workers' incomes over the same three-quarters of a century, especially for such relatively skilled occupations as upper-leather cutters, and lasting and making room machine operators.

Finally, note that world-wide there has been no essential technological advancement in the mode of shoemaking machine-process technology during the past fifty-five years! This is as applicable abroad as it is in the U.S. itself.

There is nothing arbitrary in the selection of the Goodyear Welt as the model of a wearable shoe. The Goodyear Welt is essentially the attachment of both the upper and the bottom (sole and heel) to a common connecting structure, the "rib" of an innersole. In this arrangement, the wearing characteristics of the upper portion of the shoe are less affected by distortion of wear in the sole. If the materials used are of suitable quality, the shoe retains its foot-fitting qualities for all its useful life. So far, no material developed has the healthful qualities for footwear of leather. Any other type of footwear construction presently in existence is relatively junk by all quality standards of usefulness.

People have generally worn other inferior types of shoes either for special reasons of vanity (women's cement high heeled pumps; high-priced, comfortable, but not durable turns and kindred forms of slippers) or because they could not afford a good pair of welts. In general, the use of types of footwear other than Goodyear Welts — barring vanity and a few specialist uses

of footwear — is simply for reasons of price.

What has happened is that the combined lack of significant technological development in methods of welt shoe manufacture and a real erosion of U.S. workers' effective take-home pay has priced good shoes out of the reach of general use by members of working-class families. Since the prevailing methods of footwear manufacture are distinctively backward today, the manufacture of "popular" inferior types of footwear within the price range of most households depends upon unskilled cheap labor.

This means that there is little demand for skilled footwear labor, and, consequently, qualified shoemakers are a vanishing species, limited to a tiny proportion of mostly aged and retired workers from that industry. The U.S. labor force is not reproducing skilled shoemakers! The proportion of total family income allocable to footwear purchases is too small to permit the U.S. to meet U.S. standards of skilled or semi-skilled incomes for workers in that industry. Or, in short, the U.S. is unable to produce its own shoes economically because the typical U.S. citizen can not afford to buy good shoes at today's state of technological backwardness of the world's footwear manufacturing technology.

In general, the footwear imports into the U.S. — chiefly imported by leading U.S. footwear manufacturers! — are junk, and are imported because the U.S. workers cannot maintain U.S. workers' living standards in occupations of producing junk footwear. By junk we mean typically zories from Japan, sneakers from various origins, and those hideous, uncomfortable and actually unsafe "high platform" monstrosities assembled from some ungodly materials.

Conversely, if the U.S.'s workers generally were able to afford good footwear for their families, the ratio of foreign imports would drop automatically. Footwear workers in most foreign countries would have difficulty in producing high quality shoes in competition with the skills potentials of U.S. workers, especially if our footwear technology were brought into conformity with current general technological potentials (eliminating the tacks, staples, and thread holdovers).

The point illustrated is this. "Cheap labor" is a vicious fallacy. The particular capitalist usually measures "economic productivity" as the ratio of value of product produced to the wages paid for that production. Hence, to the heteronomic individual



capitalist, it may appear that cheap labor is relatively more productive. However, cheap labor perpetuates a low level of material culture within the population, and in the most extreme cases, depends upon a depletion of the living standards of populations contiguous to the employed industrial population.

This point is notably demonstrated in the recent history of Brazil. The once-touted "success" of the "Brazilian model" has led toward a virtual breakdown of the population as a whole. The case of epidemic-ridden Brazil today is an indisputable warning against the heteronomic yardsticks of economic development which were tolerated during, for example, the UN's first and second development decade programs. Brazil is the horrible extreme example of the point illustrated by the case of footwear consumption.

This does not mean that the world can presently afford the standards of U.S. skilled workers' incomes for unskilled labor in the developing sector. If all available capacities were oriented to producing consumer goods — an economic insanity, if it were possible — we could not provide such income levels. If such a policy were attempted, most production would occur at a massive labor-cost deficit. *The cultural level of most of the world's labor is too poor to permit those persons to even approximate a U.S. standard of skilled productivity.* Even if such an arrangement might be recommended on charitable grounds, it is physically impossible to implement.

However, it must be our policy to eliminate that discrepancy through development. We must pay labor in the development sector *slightly more* than its present productivity would warrant (in terms of combined household income and public services) in order to accelerate the development of the level of material culture, pacing that advancement against the introduction of modern industrial technology in the employment of labor generally throughout that sector. Every particular development effort in any part of the developing sector as a whole must be assessed in respect to its effect on the advancement of the material standards of living and quality of productive employment of the developing sector population as a whole, within especially that nation and region.

The emerging policies of Iraq are exemplary of the proper direction of treaty programs. The Arab sector represents ap-

proximately 120 million persons which have sufficient agreement in language that any Arab is economically assimilable into any part of the entire Arab sector. At the same time there is a disparity in the relative concentrations of income-producing primary resources (especially petroleum deposits) and of Arab populations. Hence, it is irrational to regard present national boundaries as the basis for economic development programs. Arab Unity is a matter of elementary economic rationality.

Agriculture and industries must be developed where overall circumstances recommend their placement, irrespective of the location of the primary resources whose sale provides the bulk of development capital. Such "Arab nationalism" (using the other Arab word also translated into English as "nationalism") is imminently — properly — a kind of internationalism, implying and already leading in a preliminary way toward Arab close cooperation in the development of non-Arab Third World regions.

In sum, Third World agreements with the industrialized sector must be based on standards of continuous and accelerating rates of improvement in three interconnected parameters of development performance: *shifts in population characteristics, real income per capita, output per capita measured in terms of the social ratio  $S'/(C+V)$ .*

The target objectives of development are the following: (1) To attain the population characteristics of the industrialized sector for the developing sector, including the ratio of the agricultural population generally, the period of maturation of the young, levels of education and leisure, and effective social-reproductive ratios of the form  $S'/(C+V)$  comparable to those of the present advanced sector. (2) To orient this development toward the infrastructure of CTR-oriented technology emerging during the 1985-1990 period.

The program must emphasize four general targets of immediate projects: (1) A crash development of agricultural potentials, (2) expansion of utilization of primary materials resources, (3) the development of urban centers around those consumer goods industries which are better located in that region, and which therefore afford an optimal catalyst for developing a qualified industrial working class from the ranks of unemployed urban populations and former rural residents, (4) the selection and development of major industries, including

capital goods industries such as steel, in those foci of the developing sector according to rationalities of a world division of labor.

### THE "RAW MATERIALS" FALLACY

Some Arab socialists had made the important observation that while petroleum reserves are in one sense a source of immediate advantages, the associated habit of thinking in terms of a high-priced primary materials asset is also a dangerous obstacle to real development. Iraq, for example, is using its petroleum deposits, but it does not desire to remain a nation subsidized by its oil revenues. Iraq needs and desires an agricultural development which will make Mesopotamia — again, as during the reign of Caliph Haroun Al-Rashid — a region meeting the food requirements of 30-odd million people — instead of Iraq's present approximate 10 million. Iraq desires an industrial infrastructure based on a developed, proportionately large Arab working class. The OPEC manifesto of Algeria's President Boumedienne reflects the same kind of Arab outlook.

This Iraqi outlook is not accidental. The postwar Arab socialist is predominantly a representative of a developing Arab intelligentsia. As a socialist he has a fragile social existence, because of the continued misery of the mass of poor farmers, large numbers of lumpenized Arabs, and a relatively tiny Arab working class. Politically, every Arab socialist is originally committed to the development of a strong Arab industrial working class and to the associated task of drastically raising the material conditions of life in agriculture. Petroleum — especially during the postwar period — has been the exceptional economic lever by which the Arab socialist has intended, attempted, and partially succeeded in mediating his real economic and social objectives.

In this respect, the Arab socialist is not unlike many Third World socialists. Oil has been predominantly the lever by which Arabs have been able to practically envisage accomplishments which other Third World sections have come to regard as almost hopelessly distant. This is the basis for the special strategic importance of the Arab socialist. Circumstances, a common Arab language throughout the Arab world, and petroleum have

made Arab socialist internationalism and Arab development efforts a special sort of vanguard spokesmanship in behalf of the aspirations of the Third World as a whole.

The government of Mrs. Gandhi, the government of Bangladesh, the government of Sudan, the present governments of Indochina are ultimately no less committed to the principles of agricultural and industrial development than Arab socialist forces. Yet, to a significant degree, those other Third World forces depend upon Arab spokesmanship in the struggle for global development policies which could give actuality to their general development aspirations.

In this process, there is the constant danger to which some Arabs have referred — the danger of thinking in terms of cartel arrangements for high-priced primary materials as the solution to all problems. In some cases, such a danger becomes extremely serious.

There is a dangerous fallacy infecting a significant strata of Third World thinking, a fallacy encouraged by pro-Rockefeller counterinsurgency agencies and their academic allies. In brief, this fallacy represents a resurrection of the naturalist metaphysics of the 18th-century physiocrats, in which view all wealth is obtained from primary natural resources. That nonsense, visibly emphasized in certain Third World circles, is aggravated by large doses of an even more primitive absurdity, an interpretation of national and international economic relations from the standpoint of either 17th-century or downright medieval versions of old mercantilism.

It is urgent that the counterinsurgency ingredient of such pathetic pseudo-economic thinking be stressed. To those who have studied the documents and practices of leading postwar Rockefeller-allied counterinsurgency agencies—such as the infamous RAND Corporation—it is well known that the essential strategic orientation of all counterinsurgency policy is the propagation and cultivation of 18th-century philosophies, in opposition to the scientific outlook which emerged during the 19th-century. The resurrection of the "social-contract," the emphasis on propagating 18th-century forms of parochialist autonomy as modern "radical" demands, and the general emphasis on "pluralist diversity" are exemplary of the ideology wilfully propagated by the CIA and allied political agencies. This

policy has been hardened to the extent that it is frequently possible to infallibly identify a CIA (or similar) counterinsurgency "witting agent" at his work by the peculiar litany of RAND-Tavistock-resurrected 18th-century patter employed in attempting to recruit individuals to his enterprises.

"Primary materials"-oriented forms of Third World nationalism have been one expression of intensive "neocolonialist" counterinsurgency tactics. In general, of course, the physiocratic and mercantilist outlook tend to arise within the Third World autochthonously, mediated by a stagnant agriculture and by the situation of a "Western"-cultured petit-bourgeois governing stratum immediately resting upon a relatively undeveloped political-economic basis. In the same vein, it is historical fact that 19th-century capitalist development temporarily eradicated the metaphysical physiocratic and mercantilist views in consequence of the impact of the industrial revolution's demonstration that technological-productive development, not primarily materials as such were the actual basis for the proliferation of wealth. The denial of genuine development to Third World regions has merely been aggravated by a large proportion of pseudo-development. By pseudo-development we mean almost exclusive emphasis on large office buildings, hotels, and ideological monument-building occurring amidst an essentially unimproved broader political-economic and social base. These conditions admittedly provide fertile ground for propagating physiocratic and mercantilist metaphysical thinking among predominantly petit-bourgeois ruling strata in the Third World. However, as the Indonesian example of the "Berkeley Mafia" attests, bankrupt physiocratic and mercantilist ideologies have been not only deliberately but intensively cultivated among educated Third World strata, substantially through the aid of the quackademic political-economic ideologues of those Anglo-American universities which function as principal centers for training future Third World governing strata.

This is a significant aspect of the general RAND-Tavistock "Zero Growth" ideological campaign to eradicate the long-standing belief in the idea of progress from the thinking of educated strata in the U.S. and Great Britain in particular, and to spread the filthy mass-genocidal ideology of Zero Growth through every UN agency which Rockefeller and his allies have

been able to buy (e.g., the Economic and Social Council).

The fact of the matter is that Europe and North America were able to impose colonialism and imperialism upon the southern regions of the world precisely because *primary resources in and of themselves do not represent wealth*. The power of the advanced capitalist sector was essentially located in the relatively more cultured labor force and the associated industrial technology which were the means for transforming mere primary resources into wealth. More profoundly, these resources were a form of wealth only because they were wealth for an advancing industrial technology based on the advanced capitalist sector.

The principle historic issue of colonialism and imperialism is not that it extracted primary resources from the southern regions of the globe, but that in this process it failed to develop the quality of agriculture and an industrial labor force toward levels comparable to those in the advanced sector.

The unfortunately rather commonplace folly, to the effect that the Third World could redress the past by high prices for primary materials, would lead in practice to a mass-genocidal scale of deeper misery in the developing sector. The development of the productive (wealth-creating) powers of the developing sector's populations demands a massive infusion of especially capital goods from the industrial capacities of the advanced sector. At present, the rates of output in the advanced sector are insufficient to satisfy developing-sector requirements. Artificially high primary materials prices, especially under present conditions of world capitalist depression, merely aggravate the fall in rate of utilized industrial capacities. *For example, pegging oil prices to a basket of industrial commodities is pure political-economic insanity*, bringing inevitable economic disaster upon any oil exporting nation foolish enough to be lured into such pathetic agreements.

What the Third World requires is the ability to create wealth through massive infusions of advancing industrial technology. Unless this development reaches a level which exceeds present tendencies for collapse of Third World agricultural and industrial output rates *per capita* — that is, industrial development above a critical minimal value — even positive forms of industrial assistance are an inadequate, hence futile gesture in the right direction. The advanced sector is presently not geared up to meet

that minimal level. Consequently, any wild-eyed mercantilist gimmicks aimed at redistributing existing world income must only worsen the situation throughout the Third World.

This means that insofar as raw materials are concerned, the prices should be set at levels which provide no margin of "cheap labor" advantage for extraction in the developing rather than developed sector. Prices should be set no higher than that, at the risk of disrupting commodity relations of world production. However, this also means that such agreements on pricing of primary resources must be inextricably tied to commitments by the advanced sector to increase its gross levels of output to the scale of exportable social surplus sufficient to meet Third World development requirements, and that the intermediate and long-term inter-sectoral imbalances generated by such export programs must be in the form of credit or outright development grants.

Without a massive expansion of advanced sector industrial output, especially for agricultural and industrial means of production, there is no hope for the development of the Third World. That expanded output and intermediate and long-term credits and grants arrangements for its Third World consumption must be the kernel of all inter-sectoral treaty-agreements related to the International Development Bank operations.

The fallacy of physiocratic view, including identification of the absolute disproof of that thesis, is elaborated in *Dialectical Economics*, and therefore the development of that argument afresh here is not necessary at this time.

What must again be emphasized is this. There is no basis in sane reasoning for the argument that the Third World could acquire sufficient capital from sales of high-priced primary materials to accomplish effective Third World development. Without drastic increases in Third World rates of social-reproductivity, increases impossible without massive (trillions of dollars) industrial investment from the advanced sector over a 10-15-year term, the Third World population faces a mass-genocidal depletion of its population by a combination of hunger and epidemics. The case of the attempt to increase government tax-revenues in the nations of the Sahel is exemplary—it was that *fiscal policy which caused the Sahel drought*. If the Third World attempted to blackmail the depression-ridden advanced sector

with primary materials prices sufficient to command the necessary capital, the depression would only worsen and the Third World's situation become far worse than at lower primary materials prices!

There is only one solution — as the case of populous India exemplifies. A massive expansion of the scale of production in the industrialized sector, to provide sufficient rates of capital infusion into the developing sector to transform its populations into a modern wealth-creating social force. The parameters of treaty agreements we have identified — shifting population characteristics, rising productive output rates — are the only sane basis for Third World policies.

This approach is defined in terms of projects. The outlined development projects for the Rio de la Plata, the Sahel, the Indian subcontinent, the Fertile Crescent, and the Andes "cap" are exemplary. The progress goals of these and other projects, as translatable into shifts in population and productive output parameters, are immediately translatable into forms of the expression,  $S'/(C+V)$ , and in those forms provide an objective basis for assessing economic performance for purposes of evaluating accumulated credit issued through the International Development Bank.

## U.S. MEASURES

There will be no early U.S. recovery from the present depression-collapse until — and unless — a key meeting is convened among spokesmen for the U.S. Labor Party and a select but broadly-based grouping of key Congressmen, state and local elected officials, and a number of representative cooperating professionals in finance, industry, agriculture, and science and law. Out of such a meeting will come the agreed package of emergency legislation to be drafted by teams of attorneys for passage.

This package of legislation will be made up of three broad classes of measures: (1) economic recovery programs dovetailing with the International Development Bank; (2) emergency national financial reorganization measures which stop both depression-collapse and the inflationary threat; (3) essential basic changes in the functions of the Social Security agency and programs.

The indicated special meeting will occur as a result of three

developments which are already considerably advanced at the present moment. Firstly, the general discrediting of the Rockefeller machine and its agents in the Congress, as not only incompetent to deal with the crisis but as constituting a menace to the continued existence of civilization. Secondly, the fact that no agency but the Labor Committees and their allies has demonstrated comprehensive competence in understanding the causes and cure for the present world depression. Thirdly, that the U.S. Labor Party is rapidly developing a major plurality of support within the electorate, especially in the industrialized regions along the Atlantic Seaboard, throughout the Midwest, and in the Northwest from the San Francisco Bay Area into Washington.

A substantial number of persons will argue mistakenly that the drafted emergency legislation transforms the U.S. into a socialist state or at least a "mixed economy." A handful of foolish ultra-leftists and others will denounce the legislation on the grounds that it does *not* represent the basis for a socialist order. Such criticisms totally miss the point. There is nothing specifically socialist — even in the sense of a so-called mixed economy — in the proposed U.S. emergency legislation. The draft legislation will be based directly upon principles of capitalist legal traditions and will have the effect of rescuing the capitalist industrial potential of the U.S. sector from a general capitalist bankruptcy. Even the essential included nationalization of banks and other financial institutions (such as insurance companies) is in no sense a specifically socialist measure, but is merely the same action that any competent capitalist financial expert would be forced to recommend to prevent these financial institutions from collapsing, "domino-fashion," under the impact of a dollar-bankruptcy chain-reaction.

The most heated of the charges of "socialism" will be focused on the emergency reorganization of the Social Security agency, especially the included nationalization of essential base-line categories of health care. Such charges will be absurd. It is the responsibility of the state, even within the strict capitalist legal criteria of individual "property rights" to essential social services, to ensure the well-being of its population, especially against the effects of those catastrophes which are beyond effective remedies available to individual citizens and groups of citizens. Unemployment compensation, pension payments, and health care must be assured by the Federal state in those circum-

stances in which private and local governmental agencies are suffering a bankruptcy of their former capacities to meet those needs.

There are only two premises for smelling "something socialist" in these emergency measures. Up front, the fact that the Labor Committees are a socialist organization is key to arguments of that type. More broadly, in overall effect, the package of legislation is entirely *pro-labor*. Full industrial employment, providing organized labor the objective circumstances in which to negotiate and win restitution of wages and working-conditions levels lost during recent years, and providing meaningful social security for the unemployed, aged, infirm and ill, are policies embedded in the package of legislation. However, these pro-labor features go no further than the more or less traditional reforms which labor has either won or sought to win within the context of capitalist society and capitalist law. As for the significance of the Labor Committees' role in this affair, that point requires further discussion.

Despite a number of the most massive and blatant electoral frauds in U.S. history, the actual electoral gains of the U.S. Labor Party have recently been in the order of from 11-30 per cent in congressional districts, and in some local electoral districts even a majority. This pattern became apparent during the Fall 1974 elections, during which Labor Party candidates *officially* tallied results in that range in several congressional district. During the Spring of 1975, this performance-trend has held up. The 12-15 per cent ratio of Labor Party vote in congressional districts held up in local elections in San Francisco Bay area. Early returns showing an approximate 55 per cent vote for the Labor Party in Camden, New Jersey elections lead in expressing the higher levels of support already developing in key areas.

Admittedly, the actual recruiting to the Labor Party membership has inevitably lagged significantly behind the relatively enormous voter base around the still small cells in neighborhoods and factories. Furthermore, until the organizing mobilizes a larger proportion of that voter base to police the polls, it will be almost impossible to secure even an approximation of an honest count of ballots — especially in those locales in which some local political machines work closely, and illegally, with balloting agencies under the direction of the CIA and FBI-affiliated Law Enforcement Assistance Administration apparatus.

However, despite a combination of electoral frauds, despite a largely controlled major press, and despite those congressional aides controlled by Hubert Humphrey and Common Cause in behalf of Rockefeller, EXXON, and IBM, a significant proportion of Congressmen along the Atlantic Seaboard, in the Midwest, and the Northwest have been aware since at least last November that the Labor Party represents a substantial and growing proportion of the electorate in their home districts, and obviously, therefore, Labor Party proposals have growing weight among even those voters who have cast ballots for the elected representatives.

In fact, only massive terror-campaigns by the Rockefeller machine have dissuaded a large number of such Congressmen from continuing active consultation with Labor Party representatives in connection with key Labor Party-proposed-legislation. To any knowledgeable pragmatic elected official, growing Labor Party support in his district represents a kind of "tip of the iceberg" for broader and deeper developments in the constituency generally. Hence, throughout 1975 to date, Nelson Rockefeller personally, as well as his lackeys in the major press and others, has denounced Congressmen and others for "excessive" concern with the attitudes of their constituents.

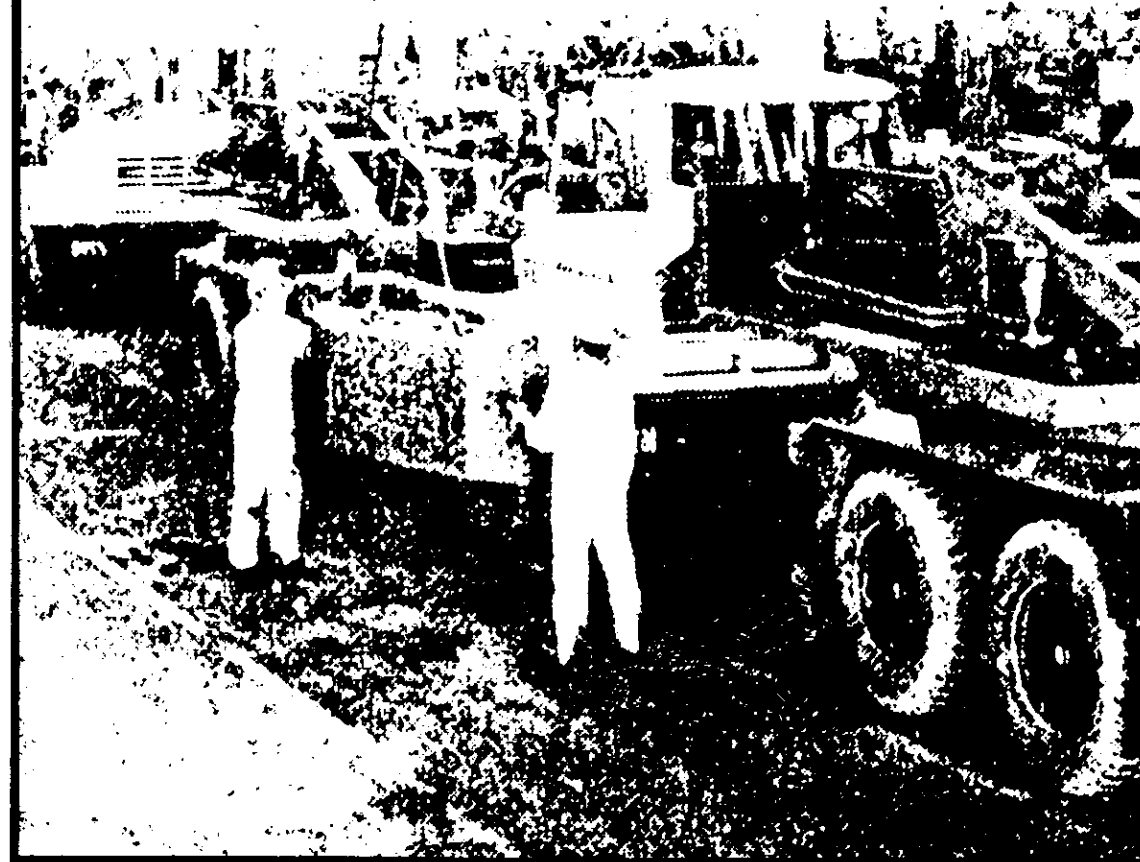
This growing Labor Party "constituency-muscle" is complemented by the massive and accelerating credibility the Labor Party and Labor Committees are developing among political and professional strata. Our most conspicuous gains in authority recently have been in connection with the thermonuclear war danger and related matters. Top professional political and military circles opposed to Rockefeller, Kissinger and Schlesinger within NATO generally not only corroborate our judgments and reports, but have come to regard us as an essential source of relevant information for the fight against the Kissinger-Schlesinger-RAND insanities. Less conspicuous, but even more broadly based, is the recognition of our authority among leading international financiers.

In short, the Labor Committees and Labor Party together have come to represent both a growing Third Party force in the U.S. itself, with up to 30 per cent voter support in key industrial districts, and a recognized leading authority in respect to the most important issues of national and international developments. To the extent that the Labor Committees are still a small organized body, it can be fairly said that never before in modern history

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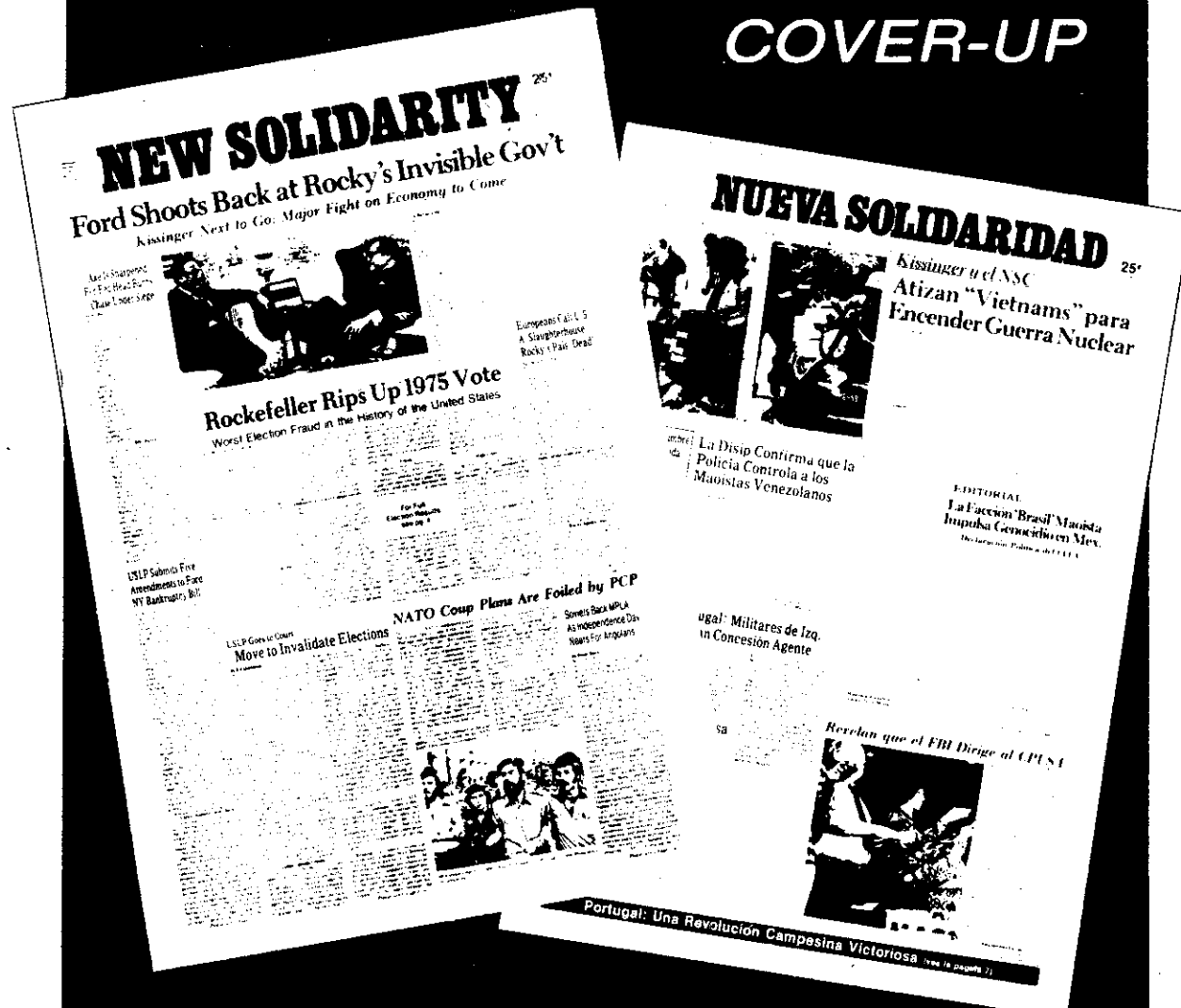
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have so few persons exerted so powerful an influence on the course of international developments.

In North America, in particular, the Labor Committees are on the verge of showing sufficient political muscle to perform a direct leading role in the shaping of national policy, at the same time that we are still further removed from the possibility of establishing an actual workers' government in the U.S. *The form and content of the proposed emergency measures reflect that fact.*

Unless effective measures are taken, during 1975, to stop both the risk of thermonuclear war and a descent into economic chaos, there will be no civilization for working people to take political control of in the period ahead. Hence, lacking the means to establish an immediate workers' government in 1975, we must apply both our political muscle and our special skills to the immediate, end of preventing the U.S. capitalist society from collapsing in radioactive ruins about our heads. In sum, we must keep the U.S. capitalist development of industry functioning *on terms acceptable to the objective interests of working people in this country.* Within that new emergency arrangement we must work to develop the base for the election of a Labor Party government in this country.

Some foolish critics — both conservative and ultra-left — will argue that this represents some sort of "stages" approach to the establishment of socialism in the U.S. This has a distant ring of truth only insofar as the increased role of public leadership by the Labor Party obviously accelerates the readiness of the majority of U.S. citizens to elect a Labor Party government. Apart from that, in respect of each and all the specific emergency legislation provisions detailed here and elsewhere, we are simply applying our political muscle and competence to the end of accomplishing the urgent financial reorganization of the bankrupt U.S. capitalist economy *which only we have the professional scientific qualifications to devise.*

### OUR EXPERTISE

Our expert situation in this should not be considered astonishing to anyone familiar with Marxian literature. Both Karl Marx and Rosa Luxemburg developed the systematic argument which demonstrates that only a qualified socialist economist can com-



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by Lyndon H. LaRouche, Jr.  
U.S. Labor Party Presidential Candidate, 1976

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prehend the most basic principles of operation of a capitalist economy. Luxemburg writes:

*"Ultimately, it was the limitation of their bourgeois mentalities which doomed both Smith and Ricardo to failure. A proper understanding of the fundamental categories of capitalist production, of value and surplus value as living dynamics of the social process, demands the understanding of this process in its historical development and of the categories themselves as historically conditioned forms of the general relations of labor. This means that only a socialist can really solve the problem of the reproduction of capital..."*

*(The Accumulation of Capital, New York, 1964, p. 106)*

The fact that numerous other professed Marxists are not competent to either independently propose what we have introduced, and that they even often lack the competence to recognize the validity of our proposals, simply reflects the fact that their professed mastery of Marx's *Capital* involves a simple fraud perpetrated upon their credulous students.

The specific fallacy which even leading financiers cannot independently overcome is the tendency to regard *prices* and *values* of both commodities and pseudo-commodities (e.g., speculative-valued instruments) as converging upon approximate equivalence. Consequently, their capacity to conceive of the problem of accumulation of income-bearing forms of fictitious capitals is generally limited to inconclusive interpretations of the margin of prices above constant-dollar valuations.

It is relevant to this point that the strongest present capitalist opposition to Rockefeller's schemes arises among the industrially-based financiers of the German Federal Republic. These financiers have not forgotten the experience of the Rentenmark, the Rapallo Pact, the Mefo Bill, and the postwar industrial recovery. In each of these instances, those industrialists have witnessed the wiping-out of fictitious capitals *as a prelude to recovery*. Hence, pragmatically, although not theoretically, those strata view the basis for capitalist financial accumulation in the production and export of industrial development, and consequently are not entirely hostile to the proposal that the troublesome burden of accumulated fictitious capitalization be liquidated in West Germany *still once again*. This attitude may, of course, be colored by

the consideration that it is dollar-denominated holdings of fictitious capital which are the major portion of the problem to be excised; nationalist thinking is not strange to the German "smokestack baron."

Together with the other European capitalists potentially ruined by Rockefeller schemes — sections of Gaullists in France, and the Cefis coalition in Italy — those "smokestack barons" of the German Federal Republic are not accidentally fostering the rapid development of a massive anti-Rockefeller faction among the political, industrial-financial and military forces within NATO itself.

However, such limited capitalists' insight into the present depression situation is largely pragmatic rather than fundamental. Consequently, the Labor Committees have even so far performed a significant, partially direct but more generally indirect and catalytic, role in fostering the consolidation of political, financial and military opposition to Rockefeller's crew within NATO circles. These capitalists' circles are able to determine what they consider acceptable or merely tolerable; the Labor Committees have so far been unique in developing the programs to be considered (apart from the key different sort of initiatives role played by the Comecon and certain Third World forces in fostering peaceful alternatives to the present world depression crisis).

It is because we, as qualified Marxian economists, fully understand the most fundamental principles of capitalist development, that we are uniquely qualified to advance an interim basis for continued capitalist sector industrial development. Since no other competent alternative is being offered from within the capitalist sector, Labor Committee expertise — even by itself — is exerting a powerful and growing influence among broad circles of top financial and political capitalist and pro-capitalist forces.

It is of no small importance that the form of our development proposals is *objectively* acceptable to the Comecon and to major Third World forces. The use of an international development bank as the means for three-way economic cooperation among industrialized socialist, Third World and capitalist-industrial economies is the specific "ingenious" feature of the proposal which renders it economically and politically feasible. Provided Comecon and IDB treaties negotiated with the capitalist indus-

trialized sector follow the guidelines we have already stated for the "Euro-Ruble" approach, cooperation can proceed on a vast scale without the risk of capitalist financial penetration of the Comecon economies. That is, to the extent that cooperation between the capitalist industrialized and Comecon sectors is directed to increasing the mass and rate of exportable social surplus from the Comecon sector, all short and intermediate-term credit issued by the capitalist to the Comecon sector for trade and capital development is currently liquidated by that mass of Comecon exports.

### **SOCIALIST PROSPECTS**

This does not signify that anti-Rockefeller capitalist factions in Europe and North America can enter into such agreements in confidence that the continuation of the capitalist system is *indefinitely* assured. On the contrary, the success of the IDB program ensures that the popularity of transition to socialism will be vastly and rapidly increased.

To be precise, the placing of major categories of currently unpayable debts into debt moratoria for a period of approximately two years will define the major political issue of the class struggle between labor and capitalists during the emerging intermediate period. The capitalist faction will gain freedom from thermonuclear war and recovery from history's worst depression by the only means available to it for these ends, in return for both an increased power of society to pay amortized debt balances and a growing popular belief that those debts need never be repaid.

Consequently, at the point that the capitalist factions supporting the IDB and related measures immediately enjoy the benefits of economic recovery, there will also begin immediately a massive preparation by both sides sharing in that new prosperity — capital and labor — for the decisive intermediate future struggle over whether the society shall remain capitalist (substantial repayments of amortized debts) or be transformed into a workers-government form (expropriation of finance-capital by debt repudiation).

Consequently, the issue confronting the more rational capitalist factions of North America and Western Europe is this. They are compelled — out of sheer rationality — to accept the IDB and

related proposals, because no competent alternative exists. However, by grasping for such immediate survival, they indirectly strengthen the forces (e.g., the Labor Committees and Labor Parties) which are committed to future establishment of workers' government. It is this latter consideration which presently motivates the reluctance and frequent outright hysteria among those financier and related political circles who have otherwise already recognized the unique essential technical and political competence of our proposals.

At the point that NATO anti-Rockefeller factions get the drunken Vice-President's thumb off the thermonuclear button, the Rockefeller brothers' political-financial empire will crumble. Throughout the world, various Third World and capitalist forces will dismember the Rockefeller financial interests in the manner of starving lions over a fresh antelope kill. Nelson will become just a quaint kook with a \$35,000 psychedelic bed and David will become merely an odd little fat man selling off a private beetle collection on the plaza in front of the then-nationalized New York headquarters of Chase Manhattan Bank.

## RIO DE LA PLATA: WORLD'S POTENTIAL BREADBASKET

by Christopher Allen

The Rio de la Plata river basin in Latin America is a potentially rich breadbasket for the entire world. Rockefeller's looting of the region — the "Economic Miracle" administered by the Brazilian junta — has so decimated the Brazilian working class that Rockefeller's "development" plans for Rio de la Plata have collapsed, lacking the labor force suitable even for slavery. If we do not implement socialist development of the region, the death of Rockefeller's Plata slave-labor project will spell economic and ecological death for millions: Rockefeller plans no further input of labor to replenish the ruined Brazilian working class; no more relocated industries; no prospect of huge petrodollar investment. Argentine agriculture, reeling from the collapse of international trade, will be wiped out. The governments of the Plata area are burdened with about \$30 billion in debts to Rockefeller banks; the means to pay — the looting of labor — has been destroyed by the destruction of labor.

Any devevelopment program must first of all solve the question of labor, without which the best "natural" resources are dead. Ecological holocaust — and the reversal of it — is above all a question of the destruction versus the reproduction of labor. Although the development of the Latin American labor force is not the explicit focus of this report, the expansion of Plata agricultural production that we analyze below is in fact one of the first crucial steps in creating a well-fed skilled workforce. These preliminary estimations must be seen, not as providing a point-by-point agenda for implementation, but rather as an indication of the kinds of agricultural and infrastructural measures a world workers' government can apply to turn the Plata into a productive agricultural area *fast*. The speed with which we can do this makes starkly obvious the extent of Rockefeller's criminal sabotage in destroying the labor which could make the Plata an enormous food producer.

The mechanism for initiating and sustaining the agricultural development of the basin and for consolidating it as the nutritional keystone for other areas of Latin America is the revival of trade through an International Development Bank. Triangular

trade arrangements would be set up among, say, the Venezuela-Colombia region, the advanced sector, and the Rio de la Plata zone. Colombia and Venezuela, rich in oil, iron, coal, and other minerals, would provide these vital inputs to the advanced sector, which would in turn supply the tractors and fertilizer required in Rio de la Plata. Grains from the Plata region would be shipped to the Colombian-Venezuela region both to feed the population directly and to build up the large undeveloped cattle herds of the area, thereby vastly improving working class diets.

### DESTRUCTION OF A RESOURCE

The Rio de la Plata river basin and its adjacent areas have roughly 250 million hectares of rich, black, mollisol topsoil. The Great Plains in the U.S. and the Soviet wheat belt are the only other areas with this kind of soil and la Plata has an advantage in climate and proximity to the ocean. About 70 per cent of the mollisol zone has over 30 inches of annual rainfall, short mild winters, and very low frost incidence, as well as extensive water resources for transportation and easy irrigation and drainage. Of major significance are its human resources: the Argentine working class is the best nourished, best educated, and most skilled in all of Latin America.

Rockefeller has prevented this potential from being realized. No capital has been invested in Argentine agriculture and infrastructure since the Rockefellers took over from British interests in the area during World War II, installing Juan Peron — and now his widow Isabelita — to run the looting. Though the Pampas plains have among the richest soils in the world, average yields are the same as those of the rest of Latin Amerca, because not an ounce of fertilizer is used in this region. Hundreds of millions of acres now lie idle as "pasture."

The Rockefeller Oil Hoax has virtually bankrupted Europe, the traditional buyer of la Plata agricultural commodities. Argentina, for instance, normally depends on this trade for 85 per cent of its foreign exchange, but last year Argentina had to *import* wheat to meet its export obligations contracted a year earlier, and beef exports fell due to lack of solvent customers. Argentina's invaluable cattle herd is being rapidly destroyed: 40 per cent of the total cattle slaughter now consists of cows, as opposed to a normal 20 per cent.

## UNCONTROLLED DISEASE

The diseases spreading throughout the Plata region are breeding in the decimated Brazilian population. While production has risen by 50 per cent in the last decade the material living conditions of the working class have been slashed by almost 60 per cent. The diet has fallen to 2000 calories; natural resistance to disease has crumbled. A crippling lack of sanitation provides the medium for deadly illness.

Meningitis has become a raging killer, with the number of annual cases growing from approximately 2,000 cases to upwards of 60,000 in less than two years.

It is just a matter of time before the Brazilian plagues move down the Parana River valley. The Parana is at once Brazil's sewer and Argentina's drinking water. Meningitis cases in Argentina for 1974 were up by 350 per cent.

Serious parasitic illnesses, such as chagas and schistosomiasis, which together affect about 20 to 25 million Brazilians, are spreading at alarming rates. Now it afflicts the entire country and is creeping into the la Plata area via migrant workers who have been herded to the slave labor hydroelectric projects on the upper Parana.

Almost every other serious disease known to man is on the rise in Brazil, from measles to bubonic plague to mutated illnesses that are found nowhere else on earth — yet.

The only thing still protecting the Argentine working class from this kind of holocaust is its protein-rich diet, the result of the availability of plentiful amounts of beef at low prices. An average Argentine eats about as much beef as an American. Soon, however, the spread of animal diseases, plant blights, and other ecological devastation — as well as the present herd depletion operations — will mean beef shortages. At that point, the Argentine working population, like the Brazilian, will become a breeding ground for plagues.

## REVERSING DISASTER

Immediate steps must be taken to reverse this spreading destruction of the population. Emergency shipments of medicine to Brazil can halt the spread of disease, minimize its effects, and cure masses of already infected workers and peasants. Medical

and health planning personnel must be supplied not only to treat the sick, but to develop adequate sanitation on an emergency basis, crash production of prefabricated housing and so on. An international emergency effort can — and must — stop ecological disaster in Brazil, reverse the conditions of emiseration on which it feeds and maintain a standard of living for the rest of the continent adequate to forestall further collapse. No talk of development is serious without moving now to ensure that the world's working class is not robbed of millions of productive human lives before we can implement Latin American development programs.

Latin America has masses of unemployed agricultural workers who can be set immediately the task of cultivating the Plata. Massive emergency food shipments, and production and shipment of tractors and fertilizers, from the advanced sector can be combined with this now idle peasant population to produce food. As mentioned, the question of *skilled* labor is the critical problem for Latin America — a problem we do not discuss here. But we have the agricultural labor resources to upgrade agricultural production tremendously in la Plata now, which is the first prerequisite to developing that skilled labor force.

Preliminary research and discussion with agronomists who have worked in the area show that with sufficient inputs of fertilizer, mechanization and irrigation, total output potential can be increased immediately at least tenfold.

The measures we outline assume that since rainfall and climate are more than satisfactory relative to inputs of nutrients and machinery, emphasis on these last two factors will give the most efficient results. Experiments using only nitrate fertilizers, for example, have improved yields per hectare in the Pampas by as much as five to six times. A third factor — and the least expensive in terms of social cost — is bringing presently fallow or pasture lands under cultivation. Finally, we consider the more costly process of irrigation and drainage.

At present approximately 30 million hectares of the soils we will develop are under grain cultivation, producing an annual total of about 45 million metric tons. With the use of 340 kilograms of fertilizer per hectare, the meager yields of 1.5 tons per hectare can be immediately increased to 5 tons, at a conservative estimate. (However, detailed studies on the reaction of Plata soils to various types of nutrients must be made.) Using the 340 kilogram

figure, we estimate that the present 30 million hectares will require 10.2 million tons of fertilizer. The improved yield would mean a leap in total regional grain production from 45 to 150 million metric tons. If action is taken now, these results could be achieved with the next harvest in early 1976.

To this original acreage we will add approximately 75 million hectares of land ideally suited for intensive agriculture, but which are now classified as "pasture" — land abandoned due to the collapse of capitalist agriculture in the area. Argentina alone has over 140 million hectares of "pasture," of which at least 50 million can be immediately put under cultivation. We estimate that another 25 million hectares can be reclaimed in Brazil, Uruguay, and Paraguay, totally 75 million hectares which can be utilized by the second year of this program, when the necessary fertilizer and tractors can be provided. With the proper inputs, the 105 million total hectares brought under fertilized cultivation would produce approximately 525 million tons of grain — more than ten times greater than today's 45 million!

## FERTILIZER AND TRACTORS

The main input bottleneck to realizing this potential is nitrate fertilizers. World phosphate and potash (potassium) deposits are enormous and do not present any major problems in producing the amounts required for the world. Potash for the Plata area, for instance, can be imported from rich deposits such as the ones in Canada.

World phosphate deposits are estimated at 130 billion tons, with present installed processing capacity at 175 million tons per year. The Plata would require only 10.5 million tons in the first year, using a liberally estimated nitrate-phosphate-potash ratio of 40-30-30. Both Brazil and Peru are rich in phosphates. The Bayovar 10-billion-ton deposit in Peru is near a port capable of handling 150,000 ton ships, while the smaller Brazilian deposits have a higher P O content. Lacking in both cases is minimal mining equipment in quantities easily available from a converted U.S. economy.

Nitrates, however, are produced almost exclusively in costly petrochemical plants, and present more considerable problems for Plata development. Present capacity of such fertilizer complexes in the Andean Pact countries, Brazil, and some of the

Caribbean islands totals about 3.3 million tons per year, leaving an 11.4 million ton shortage by the second year. Though the Plata will be a very high priority area in allocation of worldwide agricultural inputs, it is doubtful it will be possible to divert what amounts to more than a quarter of present world production of nitrates to South America.

Exploitation of the huge Atacama natural nitrate deposits in Chile would be an easy solution. The rail and port infrastructure is in place; all that we require is investment in new earth-moving equipment and railroad cars. However, given the large amounts of secondary elements in these nitrates, they can be used on only certain soils, and not enough research has been done in this field to permit reliance on Atacama at this point. We need to know if soils can be compensated for the Atacama nitrates or if it would be feasible to process the mineral before it is applied.

There are currently about 500,000 tractors in the Plata region, though many of them need repairs or should be scrapped altogether. Argentina and Brazil together produce only 70,000 tractors at present rates. Current tractor stock is adequate for the first year's output, but by the second year an additional 900,000 will be required — easily within our reach.

## TRANSPORTATION INFRASTRUCTURE

There is no real problem in producing half a billion tons of grain. The difficulty will be transporting the crop once harvested. The infrastructure of the area will have to handle ten times more freight than it has thus far. This will require an immense transformation of the Plata transportation, storage and port networks.

Argentina, the hub of the area's transportation network, has an excellent railroad layout, but it is thoroughly outdated. To avoid having to overhaul the whole system — an impossible task for the first two years — approximately 60 per cent of the harvest will be transported by river and roads. Nevertheless, we estimate that at least 1,000 kilometers of track will have to be relaid immediately and a crash development program of a modern terminal in Buenos Aires will be required. Given the moderate climate we will probably be able to overlap crops so that the harvest will cover a four-month period, easing pressure on the transportation system. Still, we will need an additional 20,000 50-ton boxcars to supplement the existing stock of about 30,000 usable cars. This

will be easily obtained from the advanced sector (present sluggish boxcar production in the U.S., for example, is 150,000 units per year). A more difficult problem is doubling Argentina's locomotive stock of approximately 1,000, but given the short as well as long-range promise of this region, the necessary resources of the advanced sector will be allocated.

The road networks in Brazil, Uruguay, and Argentina are more extensive and in better condition than the railroads. Since the distance from the growing areas of the ports is relatively short, the social cost of trucking versus rail transport is more nearly equivalent, especially given the fact that Brazil and Argentina already have a combined truck fleet of about two million. This, along with an annual productive capacity of 400,000 units will be more than adequate for carrying a major portion of the harvest.

The Plata basin's extensive river-system will also provide ample transportation, and once the upper Parana is dredged, grain from the Brazilian upper la Plata basin can be shipped cheaply by barge all the way to Montevideo and Buenos Aires. This will allow for direct transshipment by vacuum pump from barge to freighter in the middle of the la Plata estuary, minimizing crowding of port facilities.

Ports in the Plata region are extremely inadequate. Buenos Aires is decaying as a result of the decline of trade and a lack of capital investment, and its waters are far too shallow. Montevideo, also in poor condition, is a deeper port than Buenos Aires. Porte Alegre and Paranagua are good deep-water ports, but not well-linked with the most fertile zones.

Port renovation, plus construction of new deepwater ports, will be essential to our longer-range strategy, but in the short run we will have to find ways to circumvent this bottleneck. Barge transshipment and land-to-ship conveyor belts will free mooring space and allow for larger freighters. A longer harvest period as a result of crop overlapping will also take pressure off the ports, as would vastly expanded on-farm grain storage. Studies must be made on the relative costs of vastly expanded production of on-farm silos and elevators and necessary drying equipment.

We have described what we estimate to be the immediate potential of the Plata region, based on short-term available capital inputs. Breakthroughs in fertilizer and transportation technologies will mean expanding cultivated area by an additional 55 million hectares, for a total of 160 million hectares of cultivated

land. Eventually we will irrigate huge portions of the Plata basin to allow for double-cropping 130 million hectares, for a total regional output of 1.5 billion tons of grain for human consumption — *more than total present world production!*

As we build new feed lots and otherwise modernize the cattle-raising sectors of Argentina and Brazil, we will be able to sow mostly animal feedgrains, which have even higher yields than the 5.0 tons per hectare we have been using as a guideline. The resulting leap in the quality of the diet, plus the simultaneous development of infrastructure and the educational level of the working class, will provide the basis for the next step: the industrial development of the Southern Cone of Latin America.

## TECHNICAL BRIEF ON THE INDIAN SUBCONTINENT RIPARIAN PROJECT

Within two years an initial \$12 billion capital construction and development program will end the majority of massive flooding of the Ganges-Brahmaputra Rivers. By harnessing the devastating annual floods and applying the waters to expanded food production, regulated irrigation will assure that two or more high-yield crops are achieved in Bangladesh and the Gangetic Plain of India by 1976, eliminating the threat of starvation facing the subcontinent population. A crash program for flood control is essential to prevent another year of floods, followed by drought, famine, and epidemics destroying millions of lives on the subcontinent, and to create the essential precondition for use of fertilizers and mechanization to realize the full potential of this fertile region.

The major problem facing the Indian subcontinent is the sharp unevenness of water distribution. During the monsoon, up to a hundred or more inches of rain swell the major rivers and tributaries into deadly floods. On the other hand, there is little or no rainfall the rest of the year, so that the fertile Gangetic-Brahmaputra Plain is turned into a virtual desert unless irrigation is used. Ideally the solution to the poor distribution of water is storage of monsoon flood waters in surface reservoirs for gradual release the rest of the year for

irrigation. This extreme flatness of the plain excludes the construction of dams and reservoirs on the rivers themselves, but demands long-distance pumping of enormous quantities of water to mountain valleys on the Deccan Plateau or at least the foot of the Himalayas.

In Bangladesh, flooding is compounded by the confluence of the Brahmaputra and Ganges into one outlet emptying into the Bay of Bengal, concentrating more water than can possibly drain in this short time. This already severe flooding is further amplified by the action of tides and hurricanes in the shallow Bay of Bengal. Often the annual hurricanes will send a 15 meter high wall of water back up the swollen Ganges and Brahmaputra Rivers several hundred kilometers. Even in the absence of tropical hurricanes, the drainage of the Ganges out of India into flood-swollen Bangladesh is so blocked that the Ganges backs up in India far upstream.

### **EMERGENCY FOOD MEASURES**

Until the subcontinent has achieved minimally a doubling of current grain production by 1976 — if this plan is implemented — imports of emergency food from the reserves of advanced countries are needed to raise the caloric intake above starvation levels. This emergency measure, including broader supplies of medicine and sanitation equipment, is needed to end the immediate threat of mass starvation and outbreaks of epidemic diseases, providing a breathing spell for the Indian and Bengali populations to get back on their feet for the immense job of reconstruction ahead.

The combination of flood control and fertilizer, minimally doubling yields to two tons per hectare, and expansion of land under irrigation by 30 million hectares, will produce 280 to 400 million tons by 1976, by conservative estimates — double to triple the current annual harvest.

### **FLOOD CONTROL MEASURES**

A combination of five measures is necessary to manage the floods by the 1976 monsoon season, beginning in July.

First, one half the flood flow of the Ganges — about one quarter of the combined Ganges-Brahmaputra flow — 36,000 cubic meters per second (cum/s), will be diverted from the

confluence with the Brahmaputra and rechanneled into the Hooghly River, the original Ganges channel of 400 years ago. The other half of the Ganges' flood flow will continue in its current channel meeting with the Brahmaputra. This measure should alleviate the major portion of backup of the Ganges within India, and make the dimension of river flooding within Bangladesh more manageable. Rechanneling of the Hooghly River, now choked with silt, is the major earth-moving task for immediate alleviation of flooding. The dimensions of the Hooghly River must be expanded to 1 kilometer wide, 60 meters deep and a length of 375 kilometers.

Second, a sea wall will be constructed across the side of the channel of the Ganges-Brahmaputra delta, protecting Bangladesh against the additional flooding of tide and hurricanes. During the dry season, the sea wall will act to protect the delta from salt water intrusion.

Flood control on the rivers requires dredging to deepen the channels and construction of flood levees. Dredging is necessary to remove the constantly accumulating silt which eventually causes a rising of the river bed, resulting in a constantly shifting river channel. Leveeing is a parallel measure which will contain flood waters within the trained channel during flooding. Besides a frontline levee 15 meters in height or more where needed, a secondary levee 7 meters high will be set back from the river channel 5-10 kilometers to form a reserve basin to trap any overflow, protecting the broad flood plain from annual flooding. Initially, leveeing will be concentrated on those stretches of the Brahmaputra subject to the most severe flooding, as in northeast Bangladesh. This will require works 375 kilometers in length.

An integrated and immediately usable method of irrigation and flood control is the use of numerous tubewells to draw down the underground water table during the dry season, so that the soil has a greater absorption capacity for the monsoon rains. This method, originally proposed by Robert Revelle of Harvard, uses underground aquifers in place of surface reservoirs for which the topography of the Gangetic plain is unsuited. By irrigating 20 million hectares in India with tubewells concentrated in corridors bordering the Ganges, a total drawdown of 60 billion cubic meters will be accomplished, a significant reduction of the flood level.

The major portion of irrigation in Bangladesh will be ac-

completed with river-based irrigation. Some 5,000 tubewells will also be available for irrigation in areas unable to tap river water for dry season irrigation, so that the entirety of Bangladesh's 10 million hectares farm land can be double-cropped annually.

In order to prevent expanded irrigation facilities from becoming transmission vehicles for enteric diseases and water-borne-diseases like schistosomiasis, sanitation practices for collecting human wastes and garbage must be introduced and adapted to the current household technology by means of central collection sites and equipment. Until a modern system of sewage and water supply lines are installed, these measures are necessary to stop the continual recycling of and re-infection from human disease organisms.

#### Immediate Implementation

These measures represent what can and must be done before the 1976 monsoon to make the subcontinent self-sufficient in food production. By 1980 the subcontinent can become a major food exporter, producing well over a billion tons of grain annually. To meet the area's short-term food deficit, 25 million tons of grain for immediate delivery out of advanced countries reserves is needed to supplement the 1975 harvest.

### GANGES DIVERSION CANAL

As the construction tasks of the Hooghly Channel, the sea wall, and leveeing are completed by 1976, equipment will be freed for digging a diversion canal at Allahabad. This 1,500 kilometer diversion canal forms an arc on the outer borders of the Chambal River basin, thus using the existing drainage network of streams and tributaries as a natural irrigation grid. Diversion of 60 billion cubic meters from the flood-swollen Ganges and its tributaries will be stored in a series of reservoirs for regulated irrigation, ending the vagaries of drought which affect Madhya Pradesh. Hence, 20 million hectares can be brought into extensive cultivation and double-cropped in this region.

In addition to the major construction works, expansion and improvement of the existing irrigation grid requires con-

struction or maintenance of 100,000 kilometers of primary canals and 300,000 kilometers of secondary canals. Installation of field drainage tills is needed in some areas to remedy salinization of the soil and a high water table resulting from irrigation.

## COST OF THE PROJECT

### A. Earth-Moving Equipment

The major expense of this program is heavy earth-moving equipment. Digging the Hooghly Channel requires moving 10 billion cubic meters of earth; construction of the levees another .26 billion cubic meters; and the sea wall is 18 billion cubic meters.

To complete the Hooghly Channel by the monsoon of 1976, 20,000 scrapers at a cost of \$3.4 billion, 5,000 bulldozers at \$.2 billion, 5,000 graders at \$.4 billion, and 5,000 trucks at \$.02 billion will be needed. To move the one billion cubic meters of earth for levee and sea wall construction will require 2,000 scrapers at \$.3 billion, 5000 bulldozers at \$.02 billion and 500 graders at \$.04 billion, as well as 500 trucks.

To dig the primary and secondary irrigation canals for 30 million hectares will require 10,000 backhoe front end loader tractors at a cost of \$1.5 billion. An additional 10,000 trucks will be needed at \$.03 billion.

The cost of the Allahabad Diversion Canal will be far cheaper, since equipment from the Hooghly Channel will be freed by 1976 for moving approximately the same volume of earth over a much longer stretch.

The cost of providing tubewells must include not only immediate pumps and electric motors, but the electric generating plants. Providing the quantity of pumps needed, about 25,000 will cost \$200 million; and the electric generating plants with 3,000 megawatts total capacity for operating the pumps will cost \$1.2 billion. Further, by the end of the second year when the Allahabad Canal will be finished, an additional 3-6,000 megawatts will be needed, requiring electric generating plants of that capacity by 1977.



## B. Fertilizer and Tractors

Providing 30 million tons of fertilizer for the 1975 growing seasons will enable subcontinent farmers to raise yields an additional margin, minimally doubling yields in areas with sufficient water to utilize the effects of fertilizer over unfertilized fields. The cost of fertilizer from the advanced countries is calculated at \$50 per ton, given that the current \$200 per ton price was quadrupled in the past 18 months without any substantial increase in the cost of production. If the fertilizer industry of the advanced countries is unwilling to sell at \$50 per ton, the option is to build fertilizer plants on the subcontinent at the current construction price of \$100 per ton capacity. The cost of importing fertilizer is thus \$1.5 billion, or \$3 billion for the second option of constructing the plants. The latter option is in any case part of a longer-term program for exploiting subcontinent resources of petroleum and natural gas, targeting the erection of fertilizer plants as key to continued development of agriculture.

Additional inputs into agriculture directly are 100,000 tractors at a cost of \$700 million, to begin the process of mechanization of agriculture. Other implements and a faster rate of mechanization will follow in subsequent years as subcontinent agriculture is transformed into fully modernized production.

## C. Transportation

Construction of the levee system is a necessary precondition for expanding the transportation and communication system on the Gangetic Plain and in Bangladesh. Roads and rail lines must be located on top of the flood levees to protect transportation during the monsoon. Bridges must be constructed across the main rivers and tributaries replacing ferries, which are inoperative during the flood season in any case.

The capacity of the existing Indian rail system can be tripled with minimal investment in additional equipment: 20,000 flat cars; 500 diesel locomotives; 10,000 trucks with flatbed for carrying containers and other intermodular equipment; 8,000 forklifts for rail switch yards and freight warehouses; 10,000 hoists and tackles for lifting in areas with no forklifts because

of low amount of traffic; and 100,000 containers of 5-ton capacity matched to the type already in use in India. The total cost achieving an immediate expansion of transportation capacity is \$2 billion.

## Total Cost

The total cost of the above program for equipment and materials to be imported principally from the advanced countries is \$11.4 to \$12.9 billion. Additional costs of wages are not significant compared to the cost of equipment and materials, and are essentially included in the cost of providing food. Wages for the 100,000 skilled workers, easily recruited from India's large industrial work force, will run an additional \$200 million at most.

## PRODUCTIVE CAPACITY

The capacity of heavy construction manufacturers to provide the quantity of equipment needed is severely limited for only one type, the earth scrapers. Current U.S. production is only 5,000 annually; European production is significantly lower than this. Inventory of scrapers in the U.S. is about 35,000, the majority of these idled by the collapse of highway construction. Adding European inventory, the world total is about 70,000 maximum. By offering to lease 25 per cent of the current inventory in the possession of contractors — easily, the amount idled by the collapse of the construction industry — 20,000 scrapers would be available immediately. The number leased can be replaced within a one-year production period as the manufacturing industry is geared up to meet the expanded demand for construction equipment resulting from world agricultural development. Present U.S. and Western European fertilizer production is a mere 50 million tons, but if the industry is run at full capacity and targeted for priority expansion, it can be expanded by more than 100 million tons in the next year. Thus, a fertilizer order of this size can be met by the major monsoon growing season of 1976.

## LONG-TERM PROGRAM

Follow-up to the \$12 billion plan involves the expansion of flood control and regulated irrigation to the remainder of the Indo-Gangetic plain. Another diversion canal on the Ganges will be located near Patna, where four tributaries are concentrated. Additional irrigation water can be drawn from the Brahmaputra during the floods and diverted into an East-West Canal for use in the Rajasthan and Gujarat desert states, bringing an additional 40 million hectares into year-round irrigation. The subcontinent will easily produce a billion-ton harvest, almost the equivalent to the entire current world production of grain.

## NEGOTIATIONS BEGIN FOR AN INTERNATIONAL DEVELOPMENT BANK

Top-level Japanese negotiators and representatives of U.S. Midwestern industry toured Western Europe and the Soviet Union during the week of Nov. 10 with the objective of tying down a near-term international agreement on a new international bank for trade and development credits, linked to debt moratoria for the Third World.

While heads of state of the U.S., Britain, West Germany, France, Italy and Japan gathered outside Paris for the Rambouillet summit meeting on economic matters, Nov. 14-16, most advanced sector governments were gauging their stand with respect to the International Development Bank concept. Variants of this proposal are now circulating under the auspices of a United Nations agency and the Japanese government.

At a closed session of its subcommittee on trade financing in Geneva, during the week of Nov. 7, the United Nations Conference on Trade and Development (UNCTAD) presented a

four-point program for Third World economic development. The plan involves 1) debt forgiveness for the hardest hit Third World countries; 2) a five-year moratorium on other Third World debts; 3) the creation of an international institution to restructure short-term Third World debts, estimated at about \$35 billion, in exchange for 15 to 20-year debt; and 4) the use of this institution to provide trade credits for Third World imports.

In the context of the UNCTAD format, Japanese Premier Miki called on other Asian nations to participate in upgrading the Asian Development Bank at the Rambouillet Economic Summit meeting. Stating that "UNCTAD" has the most advanced approach," Premier Miki's speech spelled out the open Japanese break with Rockefeller's economic policy of immediate debt repayment.

In his speech, leaked in the Japanese daily Yomiuri, Nov. 12, Miki developed the following points, among others: 1) The time has come for new relations between the U.S., Europe, and Japan in which the recovery and growth of imports of the advanced nations is required. 2) In dealing with the problem of insuring the safety of markets in world trade, the stable, but adjustable rates system is too difficult to implement under present international economic conditions. Miki's reference is to the five per cent band compromise made by the U.S. and French President Giscard d'Estaing. 3) The advanced nations must have realistically possible programs and seek cooperation with the less developed countries, especially through the Dec. 16 "North-South" economic conference. Specifically, this requires the broadening of development aid. In addition, nations should positively participate in the solution of the North-South problem by the more modern approach of the Asian nations in UNCTAD toward the Asian Development Bank. 4) The promotion of international cooperation on research on the totally new source of energy called fusion power is necessary since it is an international problem. 5) The expansion of East-West trade is necessary beyond the ability of private capital. In this regard it is necessary to examine the integration of the West on a basis that would plan economic cooperation with the East and to study the creation of a body for such cooperation which would permit formalized agreements on the exchange of capital goods and export credits from the

West and the relaxation of the structures in the Comecon sector.

Such relaxation of structures in the Comecon sector could only refer to the international use of the Soviet transfer ruble.

In toto, Miki's proposals constitute all the essential features of the International Development Bank proposed by the U.S. Labor Party, including the development of fusion power as the basis for trade with the oil-producing nations.

Further, in marked contrast to President Ford's speech reported by the media, West German Chancellor Helmut Schmidt emphasized in a speech at Mannheim shortly before the summit that in the present collapsed state of the international economic system, no recoveries were in sight and the only basis for recovery rested on global solutions based on a development policy.

The Japanese position at Rambouillet signifies a final break by Japan with Rockefeller policy and commitment to concretize an IDB type arrangement for a new international economic order.

## THE DEVELOPMENT OF SAVANNA-SUDAN-SAHEL AGRICULTURE

by Peter Buck and Cynthia Parsons

At the ministerial meeting of the Organization of African Unity in Addis Ababa in February, the outgoing head of the UN Economic Commission for Africa, Robert Gardiner, declared that the non-oil producing countries of Africa desperately need \$6.8 billion in aid merely to keep their economies going through 1975. He identified the "accumulating reserves of the oil countries" as the necessary source. His comments were reflective of a growing awareness among government officials on the continent that their countries have been written off by the Rockefellers and their allies. The continuing deterioration of the infra-

structural and agricultural base of the economy of the continent, and the absence of any capitalist program to counter that, dooms Africa to triage, to famine and disease, to ecological holocaust, within the next few years. If massive development of key areas of the African continent is not undertaken immediately, if the effects of the ecological disasters in the Sahel and Ethiopia are not wiped out, then by the end of this decade the condition of the rest of the continent will make those areas look like garden spots of Africa.

With Rockefeller spokesmen such as George Ball and Jay Forrester (author of the "Limits to Growth") openly calling for triage and genocide, it is imperative now to take full advantage of the factional situation against the Rockefeller financier faction in the capitalist class and the thrusts of the Soviet Union and the pro-Soviet European Communist Parties to force the creation of an International Development Bank.

The limited steps that have already been taken, such as some of the recent proposals of Algerian President Boumedienne, must be coalesced into a coherent program to restart industry in the advanced sector on the basis of full-scale development of the underdeveloped world. This summer's preparation for the autumn UN General Assembly Session on the "New World Economic Order" must be used as a forum to introduce such a development program, based on expanded East/West trade and expanded trade between the advanced sector and undeveloped sector for development.

The political task of the countries of Africa, as with those of any other continent, in order to survive the next decade, is to respond to this initial motion with a political and economic initiative to bring about the development of the best agricultural region on the continent. The region in question, including the Sahel, the West African Savanna, the Sudan and the Nile Valley, shows great potential for modern, mechanized production, and it is toward such areas that all efforts must be turned, without regard for "national boundaries" drawn on a map in Brussels in the 19th Century.

Such a program requires massive credit from the industrial sector for plant and equipment and infrastructural development. At this early stage of elaboration of the project it is not possible to detail specifically the amounts of equipment and supplies neces-

sary. It is sufficient to say that it will be on the order of magnitude represented by introducing tens of thousands of tractors and massive water-control systems into the area and all of the ancillary supplies, equipment, and the necessary labor power that implies.

The financing of such a program will come from several sources:

- First, an immediate moratorium on the payment of all foreign debt service. This is not so impossible as it may sound; several countries, such as Zaire, are in such straits that they are constantly rumored to be on the verge of such a moratorium, de facto if not officially. The point is to make such a process planned and orderly and to reap greatest advantage from it, not to use it as a desperate emergency measure.

- Second, the extension of large long-term low-interest credits on the basis of future expanded production. Repayment will begin when a sufficient surplus is generated to allow for and justify it; such credits are not to be repaid by cutting back current necessary expenses. Extension of this credit by the advanced sector is the prime method for restarting industrial production.

- Third, by the exchange of technology for raw materials, especially depending on petroleum.

- Fourth, by expanded trade based on dumping the dollar like a load of rotten fish, and replacing it with (a) bills of exchange representing primary commodities, and (b) the Transferable Ruble offered by the Soviet Union for world trade — the only currency left in the world based on a productive economy, and (c) credit issued by an International Development Bank arrangement.

Although the success of these initiatives rests primarily with developments in the political situation in the advanced sector, there are numerous political initiatives that must be taken in Africa and the rest of the Third World to ensure the survival of those populations and the success of the above-mentioned initiatives.

Countries such as Nigeria must follow the lead of Iraq and Algeria, which have offered to deplete petroleum reserves in exchange for capital goods sufficient to develop their regions. Nigerian head of state General Gowon's suicidal policy of "conserving" oil reserves must be abandoned. Nigeria also must offer

to deplete its reserves in exchange for advanced-sector-produced technology for the entire West and Central Africa region. Nigeria has taken some leadership by its role in the recent founding of the Economic Community of West African States. The ECOWAS proposal for industrial development on a regional, rather than country by country, basis represents a progressive outlook. That organization and outlook, however, will be aborted if a new basis for generating development capital is not created immediately to counteract the impending collapse of the pound; 85 per cent of Nigeria's much-vaunted \$6 billion monetary reserves are held in worthless pound notes, and this ratio is typical of former British colonies.

### WHY THIS AREA?

The development proposal for the Savanna-Sahel-Sudan region is not of the same type as the projects proposed for the Ganges-Brahmaputra or Rio de la Plata regions, but represents the application of modern technology to marginally productive land, to change such marginal areas into top-quality food-producing regions. The implication is that the concept of "marginal" is a capitalist concept, defining areas where returns to investment are too long-term and *on paper* too small to make development "profitable." By scientific criteria, "marginal" means an area not yet fully developed. In this particular case "marginal" defines an area whose development will have beneficial effects on and will cheapen development of the surrounding areas.

The Savanna-Sahel-Sudan region contains several hundred million hectares of alluvial and other soils suitable for implementation of a crash program to prepare them for intensive cultivation in one or two years. Through the development of the inland delta area of the Niger River in Mali, southern Chad and several areas in the Sudan, through the introduction of irrigation and drainage systems, sufficient fertilizers and mechanized cultivation, we will be able to vastly increase yields. Taking advantage of the year-round growing climate and good rainfall in parts of the region, it is possible to double or triple crop and produce, estimating very conservatively, 600 million tons of cereals before the end of this decade.

Surrounding these areas of immediate production are areas

requiring longer-term development, where the soil is not of the quality of those mentioned above, or is too thin to allow intensive cultivation. This land, however, can be developed through a program of soil improvement, which will be elaborated below, and can in the meantime be used for grazing land.

The possibility of using less productive areas for cattle ranching has been investigated by a team from Texas Tech University, on behalf of Africare Inc. of Washington, D.C. The study produced by the team proposed capital-intensive ranching on large areas, and located several sites in Niger and surrounding countries where this would be feasible. The necessary infrastructural investment for a serious development program for the Sahel would considerably lower the \$12 million unit-cost of each ranch, since a substantial part of the cost stems from the difficulty of supplying such ranches.

Overall, the problems to be overcome are: (1) insufficient water in some parts for the necessary irrigation, and overall poor distribution of rainfall throughout the year; and (2) the present Iron Age agricultural techniques and the effects of several centuries of using Africa as a communal looting ground, an economic "free fire zone" by Arab slave traders, European imperialists and, in the postwar period, the plethora of Rockefeller-aligned banks and other institutions.

We are proposing essentially three programs for this area, specifying three main areas: (1) the Western Savanna and Sahel, including most of the states of West Africa and all the Sahel countries except eastern Niger and Chad; (2) the Eastern Savanna and Sahel, including Northern Nigeria, eastern Niger and Chad; and (3) the Sudan and the Nile Valley. Some of the problems presented in the first section are common to the entire region, as are the solutions.

## THE WESTERN SAVANNA AND SAHEL

West Africa has fed itself in the past, although it does not now. In the distant past, even parts of what is now the Sahara were food producing regions. Since then, the Sahara has been slowly spreading south, encompassing large chunks of formerly productive soil.

The result of the looting of the area by French and British imperialism, and in the postwar period by the Rockefeller fac-

tion, has been to develop the Sahara's spread into an accelerating, self-feeding process.

The "independent" history of the Sahel is a prime example of this. The French actively organized against Senegalese President Senghor's attempts to organize former French West Africa into a federation, setting up an opposing Francophone faction centered on Ivory Coast President Houphouet-Boigny. The result was the creation of economically unviable, arbitrarily designated "countries," who have no chance to develop alone, but remain controllable looting grounds. In the vain effort to generate foreign exchange for development, and to pay off external debts, such countries are forced to institute such measures as head taxes and cattle taxes, forcing cattle-herding nomads to build herds larger than the land can support without capital investment. The result is overgrazing, blamed on the nomads themselves, and the consequent exacerbation of the conditions contributing to driving off the rain-bearing winds. This is one of the prime conditions contributing to the intensity of the drought and the spread of the Sahara.

What must be done is to stop the spread of the Sahara, and then turn around the spread and begin to reclaim desert land. The key to this, and to the development of the area, is to take on the whole problem at once, not in little piecemeal projects. We must develop a massive initial "pump-priming" phase of the program that will not only develop the best areas for immediate production, but will also, through the development of the "marginal" areas, change the climate of the region, increase and stabilize the rainfall, and improve and thicken the topsoil. Ultimately, we will replace the present Iron Age techniques with mechanized farming from the Atlantic to the Red Sea.

To effect the ecological change, we have to take on several problems, the first of which is the phenomenon known as the Harmattan. This is a hot, drying wind which blows off the Sahara just before the rainy season. It blows east over the continent and meets the rain bearing Indian Westerlys, dessicating a large part of their moisture, dispersing other atmospheric moisture and reducing the rainfall, especially over the Sahel.

The effects of this drying wind can be moderated by creating a thick band of vegetation and trees across the region from Senegal to the Sudan, lowering the heat reflectivity of the area by means

of this man-maintained vegetation, dispersing the Harmattan.

The same effect is already gained further south in the Savannah, where the Harmattan dies out in the coastal countries — except, interestingly, during the drought in the Sahel, when the Harmattan blew much stronger further south and disrupted agriculture as far as northern Ghana, the Ivory Coast and Nigeria.

Thus, if we do not develop the entire region at once, if the conditions that exacerbate the Harmattan are not wiped out throughout the region, then it will continue to disrupt agriculture all over. Contrary to the opinion of World Bank head McNamara and his co-conspirators, it is not possible to spot one isolated little program here and another there and effect any change. Such programs can be wiped out in one bad year, while the debt service lingers and lingers.

The second effect to be gained from the vegetation band will be to thicken and add organic content to the topsoils. Although there are large areas of red and brown desert soils, alluvial soils and mull and alfisols throughout the area, we cannot cultivate large areas of them intensively until we have thickened them to the point where they can be plowed with anything but shallow harrows. This will be done by introducing vegetation of a type which will add organic content by depositing large amounts of litter to decompose, and will add nutrients to the soil. Over a period of several years, through a process of planting and plowing under successive growths, we will build a topsoil that we can irrigate and cultivate with increasing intensity.

Although rainfall is sufficient in most of the Savanna area to support triple cropping and the vegetation band we propose, it is not sufficient in the Sahel. Furthermore, the unfavorable distribution of rainfall over the year necessitates efficiently trapping, storing and directing all the water that falls on the area. In order to accomplish this, we can use the techniques developed by the Israelis for farming the Negev desert, using these most intensively in the Sahel. These are techniques such as the construction of subsurface dams to guide the flow of groundwater into cisterns, and building canals at the bottom of every seasonal river bed in the region to direct the flow of runoff into catchment basins. Furthermore, we must reforest every high ground area to control and conserve runoff from the rainy season. We will also need to build irrigation barrages (not hydroelectric dams unless

their placement coincides with the best placement for irrigation) to store the water from the rainy season for use during the dry season.

The irrigation project in the Sahel, to support the crucial trees and foliage to stop the Harmattan and turn back the Sahara, will be the most costly aspect of the entire program, but the aspect on which the rest of the program depends.

A large amount of the best land is in the area of only 8 inches (250 mm) annual rainfall, including two to three million hectares of alluvial soil in Mali that we need to cultivate immediately. The first source for water, the rivers Niger and Senegal, will provide us with a total of about 22 billion cubic meters ( $m^3$ ), an insufficient amount for the irrigation we have to apply.

As a short-term measure, we can reseed some areas and simply depend on rainfall, but this is unsatisfactory for long-term stability in the area. Most of the deficit between what is in the rivers and what we need will have to be made up through a combination of use of groundwater and desalination plants, in addition to the arid land farming methods mentioned above. The initial large expenditure involved in using these two techniques will be justified by the fact that they will phase themselves out after several years, by contributing to actually changing the climate of the region.

For groundwater, estimates have been made that in Senegal tube wells of an average depth of 180 meters could provide  $100m^3$  per hour, sufficient to irrigate about 40 hectares. To irrigate the entire area with groundwater would mean drilling up to 50,000 wells, the possibility of which has yet to be determined. On a less intense scale, however, this can be considered as a stopgap. The main problem with this is the fact that there is almost *no* accurate data on the amount and quality of groundwater, a shortcoming which must be corrected immediately with an accurate comprehensive survey. It is no surprise that this is the case; it is not customary to determine the blood type of a person one intends to bleed to death.

Recent developments in the technology of desalination have drastically lowered per gallon costs of desalination, especially with large plants. Therefore, to build several plants with capacities in the tens of millions of cubic meters per day of fresh water, while a short-term engineering problem, would be an economic benefit in the long run.

## EASTERN SAVANNA AND SAHEL

The problems with soils and the basic strategy for the Lake Chad region are the same as those for the Western Savanna and Sahel. The water supply problem, however, is far less severe. First of all, the Chari River, flowing directly into Lake Chad, has a respectable flow of around 38 billion  $m^3$  per year, larger than the inland flow of the Senegal and Niger combined. Drainage of the swampy land in southern Chad into it will enhance that flow and provide water control for irrigation and immediate intensive cultivation of the region. Concentrating the water will also minimize the amount lost to evaporation.

The main source of supply, however, will come from the diversion of a large part of the Zaire River and all of the Ubangi River, north through the Central African Republic into southern Chad and thence into the Lake. This is a plan that has been researched and proposed, but never implemented, several times in this century. It would supply around 448 billion  $m^3$  of water per year, making a vast and virtually drought-proof reservoir out of Lake Chad, with a good part of the water coming from several thousand kilometers distant. It will also be necessary to build embankments along the diversion, to get the water level as high as possible, and reduce pumping to a minimum, Lake Chad will have to be embanked for the same purpose.

This plan makes obvious the necessity for water agreements with Zaire and the Central African Republic for the diversion schemes, based on water now in return for food in three to five years.

## THE SUDAN AND THE NILE VALLEY

The Sudan, heart of the Nile Valley and once the granary of the Pharaohs, now lies dying for lack of capital-intensive investment. One problem is the advice of the World Bank to grow cotton for export, instead of grain, a felony compounded by that institution's constant desire to get maximum return for minimum investment. They call this policy "determining the economic feasibility" of a program.

There are, however, no great problems with soil or availability of water; even by capitalist thinking, the Sudan is recognized to be of immense agricultural potential.

The serious development of the region starts with concentration and control of the flow of the Nile, especially the White Nile. Half of the flow of the waters from the Lacustrine region into the Sudan evaporates in the extensive swampy Sudd, occupying a large area in southern Sudan, before that water even reaches the White Nile. The solution to the problem is to drain the swamp and to contain the 70 billion  $m^3$  of water entering the country from mountain runoff, river flow, lakes and local rainfall. Furthermore, the drainage of the Sudd and reclaiming of the land will increase food production and wipe out the source of many diseases, mainly malaria. The poverty of World Bank schemes is attested by the fact that this has not yet been done. A simple but effective plan, drafted years ago but never implemented, called for an improved canal from Jongelei in the Sudd to Malakal on the White Nile. This would capture and conserve much of the water that otherwise drains into the Sudd. In fact, a series of canals can be built to create a system of irrigation and drainage to be tapped when the area is cultivated. This plan also called for the use of Lake Victoria, the major source of the Nile, to be used as a storage reservoir. The Lake can also be embanked to increase the controlled volume flowing into the White Nile, the water to be controlled by the Owens Falls dam and other barges and dams. Similar projects should be carried out on Lake Albert and the other lakes and rivers upstream from that, as far south as Tanzania, and on Lake Tana in Ethiopia. Additionally, the banks of the White Nile will need to be built up to carry the additional flow, concentrating the water and saving over 12 billion  $m^3$  otherwise lost to evaporation each year.

At present, a little less than two million hectares of Sudan's excellent soils are cultivated and irrigated. With the programs outlined above, it will be possible immediately to open up 12 million hectares, and ultimately to increase that by several hundred million. With 6,000  $m^3$  per hectare for irrigation, where needed, two crops can be grown, with a third irrigated by rainwater. At present, due to the primitive irrigation system, out of the 1.8 million hectares irrigated, only half are used in any year, the other half being left fallow.

In addition to the increased land brought under cultivation in the Sudan itself, the augmented flow of the Nile and the control of water along with the installation of modern irrigation systems

must be used to increase agricultural yields all along the Nile to the Mediterranean.

### **ACTING ON THIS PROGRAM**

What we have outlined here are the basic predicates for the absolutely necessary agricultural development of Africa. We are fully conscious of the major technical problems that remain to be solved, but we are also confident that they can be solved, or that alternative methods to the same end can be developed. We now require the active participation of dozens of qualified specialists to deal with those questions and with the subsidiary but important questions that will arise.

Scientists, agronomists and other specialists who entered their professions to contribute to the betterment of humanity must realize that the avenue we propose is the only possible way to realize their potential contributions. Otherwise, in Rockefeller's world of fascism and ecological holocaust, they might as well not exist.

For the countries of Africa, the question is much clearer; if development of the scale and type we propose is not instituted immediately, if the disintegration of ecology we are now witnessing is allowed to continue, then by the end of this decade, they *won't* exist.

## **THE DEVELOPMENT OF MIDEAST AGRICULTURE**

Within two years the low agricultural production of the once fertile Mideast can be raised six times the current annual output. The programmatic basis for this rapid development of Mideast agriculture is the exchange of oil for tractors and fertilizers from the advanced industrial countries, replacing Mideast peasant technology with a highly capitalized level now only found in the advanced countries. The former Fertile Crescent and the North African grain basket, now turned into desert, can once again become major food exporters.

The pro-socialist Iraqi government has taken a step in this

direction with a \$10 billion 5-year program to massively expand irrigation and food production. The success of the Iraqi program depends on mobilizing the entire Mideast to throw off the chains of Rockefeller-multinational control, and to integrate that region programmatically into the economies of Western Europe, the Soviet bloc and North America. This is the only policy capable of thwarting the Rockefellers' present military threat to both Iraq and the Soviet Union.

If the Iraqis make the ICLC's World Food and Energy Program the basis for open political collaboration among all Arab countries, immediately by taking the program into OPEC, this will immediately draw class political lines in the Mideast. The Rockefeller redevelopment projects to relocate Western Europe's industry and skilled workers into Mideast slave-labor projects, presently stalled, will be buried forever.

### **BASIS FOR PRODUCTIVE AGRICULTURE**

The Mideast, particularly the Fertile Crescent have two optimal conditions for highly productive agriculture: year round growing conditions and generally fertile soil. The major obstacles in developing the Mideast into a food exporting region are primitive technology based on ox-drawn plow in the more advanced areas and iron tipped digging sticks in the majority of areas, and the resulting poor crop yields can be alliviated within two years through the input of tractors and fertilizers supplied from Western Europe, Japan, and North America. Overcoming the arid problem, making the deserts bloom, is a longer range plan requiring massive riparian works and construction of desalination plants there necessary.

### **IMMEDIATE PROGRAM**

On the basis of the current grain area only (both rainfed and irrigated), inputs of fertilizers and tractors can increase grain production six times over current output. This amount of grain production can provide for both human consumption and the feeding of livestock, providing for a far more efficient livestock industry than nomadic herding on the arid pastures. This will immediately provide the 170 million people in the Mideast with a



proper diet of 3000 calories and one pound of meat daily for the first time in their lives. Even with this vast increase in consumption, the Mideast will still have over 100 metric tons of grain for export.

The pitifully poor grain yields in the Mideast due to backward technology and too little fertilizer can be raised four to five times to five metric tons of grain by applying 0.38 metric tons of fertilizer per hectare in rainfed areas. On irrigated areas grains can be cropped twice a year, doubling the amount of fertilizer required to 0.76 metric tons per hectare, and increasing the yield to 10 metric tons of grain annually.

At the rate of mechanization used in the most efficient agriculture, approximately one 80 hp tractor for every 80 hectares, the Mideast needs half a million tractors in the first year to farm existing grain areas, which must be imported from the converted auto industries of the advanced countries. Simultaneously, 23 million tons of fertilizer must be imported to raise existing land to its potential level of productivity. Within a single crop year thousands of years of backwardness and poverty can be erased.

Realization of the projected yields from the fertilizer and mechanization inputs depends on immediate modernization of existing irrigation works. This means the reconstruction of irrigation canals and ditches with modern, permanent, materials, allowing minimal maintenance and easy administration of water in the right amounts at the right time. In Iraq and Egypt, the build-up of salinity in the soil, due to poor drainage of river basin soils can be remedied with the installation of tile drains in the fields. This means using about \$2 billion worth of excavating equipment to lay clay pipe drainage lines, criss-crossing the land in lines 100 yards apart. This system will also supply additional recycled water for irrigation. In areas of Iran, where there is insignificant, surface waters, the limited number of deep wells to the abundant underground water table must be expanded, while in the Khuzestan region bordering Iraq, the now poorly utilized Dez and Karun Rivers can supply water.

New irrigation technologies, principally trickle tube irrigation developed by the Israelis for direct application of a measured amount of water to crops, offers more efficient methods for delivery of water to cultivated fields. Education of Mideast farmers by trained extension agents to employ the most effective combination of contouring of the land surface, tillage practices, and crop rotation on the model of farming in the U.S. arid regions will

improve the efficiency of existing irrigation networks.

Israeli technicians, highly trained in advanced arid and agricultural technique now driving tractors on the kibbutzim can be deployed throughout the region to train and supervise the already highly politically organized Mideast peasantry in carrying out this revolution in technology.

The tremendous increase in grain output will provide concentrated animal feeds, eliminating the severe overgrazing problem, which was the cause of desertification of the Sahel. After the grain harvest in rain-fed areas, and in between grain plantings on irrigated fields, various leguminous forage crops can be planted to increase the supply of high quality animal fodder. This modern crop rotation practice both adds to soil fertility through nitrogen fixation and prevents loss of soil moisture.

Additional scientific range management can improve pasture areas too hilly or dry for cultivation by using high quality grasses like alfalfa to replace the low yield native species. This in turn can serve as the experimental basis for selection of the types of plants best suited for regeneration and reforestation of desertified areas.

## LONG TERM

Calculation of the long term plan involves two new factors: expansion of area under grain cultivation to include the rest of the arable land as judged by the FAO, which is approximately double the area now under cultivation. This then raises the problem of supplying massive quantities of fresh water from desalination plants to make up the deficit caused by inadequate rainfall and the existence of only three major rivers in the whole region.

While Turkey has adequate rainfall, as do parts of Iran, the vast majority of water in Iraq and Syria and the North African countries must be supplied by desalination based on the most advanced, low energy nozzle technology. Expansion of irrigation in Egypt is dependent on a river-basin wide riparian agreement to harness the Nile throughout its length in the Sudan and the headwaters in Ethiopia, Rwanda and Burundi.

The advanced countries must supply the \$15 billion in desalting equipment necessary for veritable rivers of water to be purified from the Persian Gulf and the Mediterranean.

Planning for the entire crops area (84.7 million hectares) to be irrigated by 1980, to eliminate the problem of irregularity of rainfall or no rainfall will give a far greater productivity per hectare for the entire area based on planting two grain crops a year (10 metric tons/hectare). Irrigation based farming in this region will maximally utilize year round growing conditions, producing a phenomenal output of nearly 1 billion tons

By the five year plan's completion in 1980, the majority of Mideast farmers will have made the transition to adoption of modern scientific farming, increasing their rate of productivity and efficient use of existing machinery and land. Nonetheless, the number of tractors required doubles to 1.1 million to maintain the one tractor per 80 hectares ratio. Although cultivated land only doubles, fertilizer use will more than triple because now the entire cultivated area will be cropped twice a year.

Even this expansion of cultivated land does not fully exhaust further potential. Satellite studies of Iraq, Syria and Iran indicate that an additional 50 million arable hectares could be brought into production with irrigation. Vast areas of the Sahara contain additional arable land needing principally irrigation for productive cultivation.

### **FREEING THE PEASANT FOR DEVELOPMENT**

The present abysmal method of farming ties the Mideastern peasant to the land in huge numbers because of minimal productivity. Forty million now live in tiny villages, without prospects of decent housing, education, or any cultural facilities at all. The mechanization of agriculture, by vastly reducing the labor required, will free 80 to 90 per cent of these for work in the cities and for migration to the labor-short nations of Europe for integration into an industrial work force. The vast task of constructing housing for the population now living in squalid slums and casbahs or village mud huts, will absorb most of this labor. To provide a minimum of 100 square meters per family of four, one million units of this size must be built in the rural areas alone. For this a crash program of modular housing is required.

For those remaining in the mechanized rural areas, the idiocy and isolation of village life will be replaced with urban amenities and culture. With a rural population density of about 10 per

square kilometer estimated on the basis of one or two families per tractor, the farm population can be moved off their land and into new towns of 16,000 farmers family and support population. From these substantial towns, spaced every 30-40 kilometers across the land, farmers would have to commute by trucks no more than 20 minutes to the most distant farms.

As primitive villages surrounded by feudal or even Iron Age methods of farming give way to modern towns, with schools, libraries, apartment houses in the midst of scientific, irrigated and immensely productive agriculture, the rural ideologies of backwardness will evaporate and the Middle East will enter the twentieth century as a rapidly growing and already huge agricultural producer, with the immediate potential for immense industrialization.

### **ISRAEL, THE KEY TO DEVELOPMENT AND PEACE**

The exchange of Israeli technical manpower and fertilizer for Arab food and fuel is the only alternative to Rockefeller's thermonuclear war provocations.

Immediately Israel can provide 10,000 specialists trained in agriculture and related scientific fields to aid surrounding Arab nations, particularly Syria and Iraq, with efficient methods of "trickle" irrigation, scientific drainage, tilling etc. A second immediate area of cooperation is fertilizer production. As one of the world's major suppliers of potash fertilizer, within months Israel could be exporting 500,000 tons per year of this fertilizer to its Arab neighbors, 10 per cent of total needs.

With the investment of \$200 million of Western European capital, this industry can be further expanded. Utilizing existing highly skilled labor, an additional two million tons of fertilizer can be produced, including ammonia fertilizer from Arab natural gas. The increase in Arab grain production—at the very first stage of a cooperative development program—can slash food prices in Israel within a year, allowing for a five fold increase in per capita meat consumption and a corresponding improvement in vegetable and fruit consumption.

### **"EXPORTABLE" EDUCATORS**

Israel's primary contribution to Mideast development is tech-

nical expertise. A multi-lateral agreement between Israel and Arab nations, Europe and the Soviet bloc for establishment of the IDB and the funding of giant agricultural development projects in the Fertile Crescent will necessitate tens of thousands of agricultural and other technical experts in the use of fertilizer, irrigation and tractors, to reorganize infrastructural development projects, and so on. As the leading country in arid-land agricultural technology, Israel is uniquely situated to supply such technical aid.

In addition to trained technicians, the Arab states suffer from a general shortage of college-educated specialists capable of educating teachers for massive expansion of education. Of the 300,000 college-educated adults in Israel, more than 80,000 are immediately "exportable"—the unemployed and those employed in banks and hotels, many of whom already speak Arabic.

In exchange for technical assistance and fertilizer, Arab countries will ship to Israel the full ten million tons of oil a year needed for full capacity industrial production and consumer use. Further, on the basis of the political and economic settlement implied by the IDB proposal, allowing for increased exports of fuel for West European production, West European industry will be able to export to Israel the capital goods necessary to alleviate Israel's greatest shortage—housing. Housing supply must double within three years—from 15 square meters per capita to 30 square meters. Peak housing production must triple. 140,000 large (120 square meters) units of housing must be mass produced each year. The \$0.5 billion of modular housing and construction equipment required for this level of production can be imported from Europe.

A three-way mutual trade and development agreement between Israel, the Arab world, and Europe can stop Rockefeller's nuclear endgame maneuvers.