

ΣΥΝΕΔΡΙΑ ΤΗΣ 22^{ΑΣ} ΙΑΝΟΥΑΡΙΟΥ 1987

ΠΡΟΕΔΡΙΑ ΚΩΝΣΤΑΝΤΙΝΟΥ ΜΠΙΟΝΗ

OIKONOMIA. — **The increase of the incomes of peasants as a basis of economic development the «greek model» of Papanastasiou-Koryzis**, by the Academician *J. Papadakis*.

ABSTRACT

More than half of mankind live in countries with gross national product less than 250 dollars, 30 times lower than that of United States. Many efforts have been done to develop these countries during the last 40 years. But they have been fruitless almost everywhere. At the beginning of the century Greece also was an underdeveloped country. But between 1930 and 1980, excepting naturally the 10 years of wars, Greece had a more rapid agricultural and economic development, than almost all other countries. However the packet of measures applied in Greece, the «greek model» is almost ignored outside Greece, and the object of this communication is to make it known, and show its inferences for the development of other countries.

But since these questions are not independent of place and time, a brief summary is given of the history of world economy since the invention of agriculture, till to industrial revolution, in each region, and period (old world, America, Australia, greek city-states, hellenistic, roman, byzantine and arab ages, the European cities of Venice, Genoa, etc.); and of the way different countries (Japan, Russia, China, India, United States, Latin America with the special case of Argentina, Africa south of Sanara) obtained their development, or faced it).

* ΠΑΠΑΔΑΚΗΣ ΙΩΑΝΝΗΣ, 'Η αύξηση τοῦ εἰσοδήματος τῶν γεωργῶν βάση τῆς οἰκονομικῆς ἀνάπτυξης, τὸ «ἐλληνικὸ μοντέλο» τῶν Παπαναστασίου-Κορυζή.

Such brief summaries show, that no economic development is possible, as long as peasants are not proprietors of the land they are cultivating, and practise subsistence agriculture, being margined from the market; moreover economic development depends closely on agricultural productivity (how low is the percentage of population occupied to produce the food the country consumes); and on purchasing capacity of the population. Therefore increasing purchasing capacity of agricultural population, which is the majority in developing countries, is a *sine qua non* condition of development. But when importation of foreign commodities is not restricted, the increase of purchasing capacity may be satisfied with imported goods, and instead of development, foreign debt increases. The system of «clearing» is a way to avoid that, and it would increase international commerce.

Naturally capital goods are necessary for a rapid development, and a plan as that proposed by Angelopoulos (1984), combined with the forementioned packet of measures, would result in rapid development.

1. INTRODUCTION

More than half of mankind live in extreme poverty, in countries with gross national income per capita between 100 and 250 dollars per year, 30 times lower than that of United States, 7 times lower than that of Greece. Many other countries have higher incomes, but lower than 1/10 of that of United States. Famines are frequent in many of these countries.

During the last 50 years great efforts have been done to develop these countries; but no appreciable results have been obtained. What are the causes of these failures? At the beginnings of the century Greece also was an underdeveloped country. Approximately 3/4 of the population were occupied in agriculture; however the country was producing only 40% of the wheat it was consuming. But between 1922 and 1982, excepting 10 years of war and civil war, the agricultural and economic development of Greece have been so rapid, that we might say, that no other country, developed or developing, had a more rapid development (Papadakis 1983). What are the reasons of this difference, and in what measure the model applied in Greece, due to Al. Papanastasiou and Al. Koryzis, is applicable to other countries?

This is the object of the communication. But we shall begin with some theoretical considerations, and a brief revision of the history of economic development of the world.

2. THEORETICAL CONSIDERATIONS

Production is a response to demand; we produce, because we expect to sell (Papadakis 1984). Demand is a sine qua non condition of production. And naturally when demand is satisfied with imported goods, it has not effect.

Investment is also needed, but no investment can be expected, when there is not demand; moreover it is sooner or later encountered, when there is demand. Unfortunately in economic literature the importance of demand is underestimated, while that of investment is overestimated.

Demand depends greatly on the income of consumers, adjusted naturally for inflation. The importance of demand has been emphasized by Keynes (1936), but unfortunately Keynes is not fashionable today.

3. ECONOMIC DEVELOPMENT BEFORE ALEXANDER THE GREAT

The phenomena, that are observed in human societies are not independent of time and place. As a consequence models and theories, arising from observations at a certain period of the history of a certain country, are not applicable to other periods, or other countries. And an historico-geographic treatment of the subject is necessary. We shall begin with the period from the apparition of non-agricultural professions to the conquest of the Near-East by Alexander the Great.

At the beginning, during hundreds thousands of years, man was living chasing, fishing, and collecting fruits, roots, etc; production per capita was scarcely sufficient to maintain in life the producer. Invention of agriculture and livestock breeding, 10,000 years ago approximately, improved the situation. But subsistence economy was prevailing; each family, or small group, was producing all goods they were needing; even barter was exceptional.

Cattle and horse breeders were nomads; the grains stored in the villages of agriculturists were for them a great temptation; robberies were frequent; and finally agricultural communities have been conquered by the nomads. A symbiosis resulted: the nomads became «feudal» rulers, defending the community against other nomads; and cultivators became slaves or serfs, obliged to give rulers a part of their production, and work for them.

Having plenty of food the rulers began to desire other goods. That is why a class of artisans, etc. began to be formed around the palaces of the rulers. At the

beginning they were slaves, but gradually they began to earn their living, selling their production or services; they were paid with food, etc., and later with money. Naturally the number of people occupied in non-agricultural professions was limited by the food the rulers had to maintain them; and such food was limited by the low productivity of agriculture. Moreover houses, monuments, roads, irrigation projects, etc. were constructed by the rulers, using labour of their serfs or slaves.

Seeking wealth and glory, «feudal» rulers were fighting one another, and as a result of these wars, kingdoms, even empires, have been formed, with an hierarchy of rulers. Lower rulers were paying «taxes» to higher ones; this fact was a source of frictions between them; that is why kings and emperors were maintaining their own army and fleet, in addition to that supplied by their subordinates.

With little differences the same pattern of development has been observed all over the world until recently; even now, in the majority of countries, by far the greater part of the population is practising subsistence agriculture, being margined from the national market; a small minority is occupied in non-agricultural professions, producing goods for the feudal rulers. But some cases merit a special mention.

4. THE AMERICAS AND AUSTRALIA, BEFORE THEIR DISCOVERY BY THE EUROPEANS

In the fauna of the Americas there were not species, that could serve as animals of traction, or producers of meat or milk. That is why stock breeding has not been developed, and cultivation was done by hand; agricultural productivity was lower than in the old world; and agriculture was chiefly practised in the deserts and high mountains, where plants grow slowly, and the struggle against adventitious vegetation is easier; the rest of Northern and South Americas was almost void of population until the arrival of Europeans; shifting cultivation was usual: forest is burn, a crop is sown, the field is invaded by weeds, and it is abandoned.

The surface, that a man can cultivate by hand is very limited; that is why, in many regions, agriculture was only a supplementary source of food, exercised by women; men were hunting, etc. Still now, in many parts, the responsibility to

maintain the family belongs to women, and they intervene actively in communal affairs; men often live a bohemian life, as hunters were living.

Since in the Americas there were not nomad livestock breeders, agricultural communities have not been conquered by them, and formation of a wealthy class has been delayed. Low agricultural productivity, and this fact, resulted in a slower economic and cultural evolution than in the old world (Asia, Europe, North Africa).

In the fauna of Australia there were not animals, that could be used as animals of traction, and /or producers of meat, milk, etc. And in the flora, there were not plants, that could produce appreciable quantities of food, as wheat, barley, rice, sorghum, or maize. That is why neither agriculture, nor stock breeding had been developed until the arrival of Europeans; Australians were still living in the preagricultural era of history.

All that has naturally affected not only the economical but also the cultural evolution of these continents.

5. THE CASE OF GREEK POLEIS AND COLONIES

Southern Greece is divided in numerous small areas, surrounded by high mountains and/or the sea, very easy to defend. Moreover agricultural land and pastures for cattle and horses are scarce, and they were not much tempting nomads. That is why instead of big kingdoms, small independent states (poleis) have been formed. In a polis all people were knowing one another, public opinion was omnipotent, and virtually government was democratic, even when there were still kings. And this fact has enormously influenced cultural development (Papadakis 1985). *The few centuries of Greek poleis contributed more to the development of science than several millenia before and after them. And the scientific progress of our days is a consequence of that initiated in these «poleis».*

Scarcity of land in greek poleis obliged them to search grains overseas. They formed colonies all over the Mediterranean, and they were with these colonies exchanging with «federal» rulers luxury goods with cereals. Such colonies were at the beginning commercial agencies, but soon they were becoming independent and handicraft producers.

6. FROM ALEXANDER THE GREAT TO GEOGRAPHICAL DISCOVERIES

With Alexander the Great cities appeared in all countries from Macedonia to west India, and Egypt. Instead of being independent, they were belonging to kingdoms governed by greek or hellenized kings. This area became one of the richer in the world of that time. On the contrary the cities of Greece, except Thessaloniki, have lost their economic importance.

It may be Cretans and Phoenicians colonized the Mediterranean before the Greeks; the case of Carthage is well known.

Rome followed a somewhat different type of development. It was not needing to import cereals from over seas. Instead of developing handicraft production and a powerful navy, it was increasing its territory annexing neighbour states. When it became cosmocrat, it was receiving taxes, with which it was maintaining big armed forces, constructing roads, monuments, etc., and offering «bread and circus» to its people. All that was increasing the demand and production of non-agricultural products.

Since the east was more economically developed than the west, the capital has been transfered to Constantinople. And while the western empire decayed, Byzantium lasted more than a millenium, because the church was not independent, and the empire was identified with orthodoxy.

Development of the Arab world followed the same pattern: «feudal» rulers receiving grains from their serfs, kings collecting taxes, and non-agricultural professions, chiefly in cities, exchanging their production and services with rulers.

After the invasion of western Roman empire by northern and eastern tribes, a great number of prosperous feudal rulers and kings appeared in western Europe; they were needing goods, that their serfs could not produce; and such demand developed non-agricultural professions and trade. The feudal rulers of western Europe were more independent of their kings than those of the east; and some cities were independent or practically independent (Venice, Genoa, etc.).

At the beginnings of this period a slow but radical cultural change took place. Because, perhaps, of the replacement of the democratic government of the poleis of ancient Greece by more and more autocratic kings and emperors, freedom of thinking, gradually disappeared, and dogmatism became omnipotent; the search of theo-

ries, that interpret logically the phenomena we are observing, and the whole universe, has ceased.

On the contrary at the end of this period a revival of free thinking and of the mentality of greek poleis has been observed. The renaissance began, and it had an enormous influence on economic development. See paragraph 8.

7. FROM GEOGRAPHIC DISCOVERIES TO INDUSTRIAL REVOLUTION

The conquest of Near East by the Turks obliged Europeans to search a new route to India; and the era of geographical discoveries began. But the countries discovered were not producing cereals; moreover to transport cereals from so distant countries, with the ships of that time, was difficult. The colonies were only sending to Europe gold, silver, spices, sugar, cotton, and other valuable goods.

Much gold and silver was arriving chiefly to Spain, and this fact resulted in an unprecedented demand of goods and inflation. In Asia Europeans were exchanging handicraft goods with «feudal» rulers; cereals coming from the Black Sea and elsewhere were obtained in the same way. But gold, silver, cotton, sugar, etc., coming from the Americas, was produced in mines or plantations, own by Europeans or the colonial government, by slaves or serfs.

The cultural revolution of the renaissance, that began during the preceding period continued; science advanced considerably, and this fact had tremendous effects on economic development. See paragraph 8.

8. THE INDUSTRIAL REVOLUTION

Until recently technologic progress was the result of trial and error, and it was very slow. But in the poleis of ancient Greece man began to search a logical interpretation of the phenomena he observes, and the world he is living; he began to build science. However to have technologic applications, science should advance considerably. That is why the industrial revolution began some centuries later than cultural revolution. It is to be noted, that during more than thousand years scientific advance had been interrupted due to dogmatisms and autocratic governments.

With our days technology 5% of working population is sufficient to produce all agricultural products the community needs; the remaining 95% can be oc-

cupied to produce other goods and services; and non-agricultural productivity has increased much more than the agricultural one. We face an unprecedented situation, which creates enormous problems, because the economic system has not been adapted to the new situation.

The problem is no more to increase production, but to find markets for the goods produced. Consumism has been developed. The free citizens of ancient Athens were happy, and they developed an advanced culture, with very few goods; if they had in addition printing, television, electricity, more comfortable houses, more rapid transports and communications, and a few other advances, they would be very happy. We could have all that working only 2 or less hours. But we are working almost 8, and we talk about productivity, the necessity to produce more per hour of work. Instead of producing to live better, we live to produce. But the subject of this communication is the development of undeveloped countries. We should only emphasize, that the problems of undeveloped countries are very different from those of developed ones; and measures, that are recommendable in one case, may be pernicious in the other.

9. DEVELOPMENT OF UNDEVELOPED COUNTRIES, GENERAL CONSIDERATIONS.

In undeveloped countries the majority of the population practice subsistence agriculture; they do not buy anything from the national market; so that the first thing to do is to terminate with this situation. Small farmers should become owners of the land they are cultivating. But that is not sufficient. In the villages and neighbouring towns there are merchants, who buy agricultural production, and sell farmers everything. Farmers are so deeply in debt to these merchants, that they do not dare even to ask the price at which such transactions are done. At harvest time farmers sell their production at very low prices; and they pay everything they buy, at exorbitant ones. Under such conditions farmers cannot buy but very little from the national market, and contribute to non-agricultural development; moreover they cannot buy fertilizers, herbicides, seeds, etc. to increase yields.

To protect farmers some governments fix minimum prices at which government buys certain agricultural products at a few great cities. But small farmers have not the possibility to transport their small production to these towns; more-

over the merchants menace them, that if they do so, they will cease to give them credit, they will demand payment of all debts, etc. So that merchants continue to sell agricultural products at very low prices; and the only effect of the measure is to increase the profits of the merchants.

To terminate with such situation a packet of measures is needed: agricultural reform without charging farmers with debts; better prices at producer level; agricultural credit; and agricultural research to introduce low cost technology. We shall discuss these measures in the following paragraphe (the Greek model).

10. THE GREEK MODEL (of Papanastasiou-Koryzis)

At the beginning of the century, before 1923, Greek farmers, more especially those producing cereals of Thessaly, Macedonia, Thrace, were in the situation described in the preceding paragraph; those producing tobacco, raisin, etc. were producing for the market, and consequently they were participating a little in national economy. Cereal producers were not proprietors of the land they were cultivating; imported wheat was paying high taxes, but the prices paid to share-croppers by merchants were less than half that of foreign wheat going out of the custom-house; agricultural credit had begun, but cereal producers were not paying their debts, so that it could not continue; yields were very low, 600kg/ha, and the country was importing 2/3 of the wheat it was consuming. Moreover the country has to settle one and half million refugees, who arrived suddenly at the end of 1922.

To face such situation, all proprieties exceeding 30 hectares, in the cereal producing zones, have been expeditiously expropriated and given immediately to share-croppers or refugees. Moreover in 1927 government began to buy, directly from the farmers, whatever quantity of wheat, even less than a bag, at the price of foreign wheat going out of the custom house; such price has been increased later, when with the crisis of 1929, prices came down in the world market. Payment was done with cheque on the Agrarian Bank, so that the bank could give loans to farmers with the certainty, that they will be paid.

Afortunately in the same time the Institute of Plant Breeding, founded in 1925, and directed by the author of this communication, introduced in the coun-

try wheat varieties, that were yielding 50% more than those previously grown; the Institute organized also seed production in Greece. Farmers adopted immediately the new varieties; the seed was sold them at credit by the Agrarian Bank.

As a result of this packet of measures, wheat production increased from 300,000 tons before 1930 to 850,000 before the war (1940). Not only yields have been increased, but the area grown has been extended, wherever it was possible, because 2/3 of the country are mountainous and cannot be cultivated.

Each year, after harvest, an enormous quantity of money was inundating the market, and creating a great demand of non-agricultural goods. The value of industrial production increased 128% between 1931 and 1937, the increase has been practically equal to that of the volume of agricultural production in the same period. The difference in standard of living between Greece and neighbouring countries, Yougoslavia and Turkey, was great, although these countries are much richer in natural resources.

The forementioned measures continued till to 1981, when the country entered in the European Economic Community, after an interruption naturally between 1940 and 1950, because of the war and civil war. Moreover the irrigation works constructed before the war began to give their results after the war. New irrigation projects had been constructed. The use of fertilizers, given at credit to farmers, and at subventioned prices, has been generalized; nitrogen consumption has increased from 6,000 tons before to 420,000 in 1983, seventy times, wheat production increased from 850,000 tons before 1940 to 2,700,000 now, more than 3 times; the country became exporter; it is to be noted, that almost all wheat is grown in Greece without irrigation, so that the increase of irrigated areas has not influenced wheat production. That of exportable crops, cotton, fruits, vegetables, increased enormously. Sugar beet production has been initiated in 1961; and in 1978 the country produced 270,000 tons covering approximately its consumption of sugar. The number of people occupied in industry and manufacture increased from 149,250 in 1940 to 671,496 in 1978 (Iliopoulos 1981), and continues increasing. A characteristic fact is that Greeks, who rarely were eating meat before 1922, consume now high quantities, while the quantity of pulses consumed dropped vertically.

It is to be noticed, that the packet of measures to buy wheat directly from

farmers has been conceived by Al. Papanastasiou, then minister of agriculture, and Al. Koryzis, then subgovernor of the National Bank of Greece. The packet has been discussed in a meeting in the ministry of agriculture, in which have participated Papanastasiou, Koryzis, *the author of this communication*, then director of the Station of Plant Breeding of Larissa, and the inspector of cooperatives of Larissa. The plan began to be applied immediately, in summer 1927.

11. THE CASE OF JAPAN

Till to approximately 1870 Japan was a feudal state, and farmers were oppressed by feudal lords. Government suppressed feudalism, declared all land propriety of government, and farmers were obliged to pay a tax of 3% on their crops to government. In the same time the price of rice has been increased, and new technology, fertilizers, etc., has been introduced. Moreover this tax, and printing money in big quantities, permitted government to increase its revenues, and spend big sums of money to build industrial plants, which have been sold later to industrialists. These measures have increased the acquisitive power of the population and permitted a rapid development. Subsistence agriculture has been gradually eliminated; farmers had incentives to increase their production and sell it. Feudal rulers have been indemnized by giving them pensions; but due to inflation such pensions lost the greater part of their value in few years.

Imports have not been prohibited, because the great industrial countries had previously imposed treaties, that were not permitting such measures. But the Japanese were preferring national products; and when the treaties expired, imports have been severely restricted.

The Greek model (paragraph 10) resembles much that applied previously in Japan; but I believe Papanastasiou and Koryzis were not knowing the Japanese case, in 1927.

Japanese economic development is facilitated by the fact, that in Japan entrepreneurs consider themselves responsible for the prosperity of their workers, and workers consider themselves responsible for the prosperity of the enterprise, where they are working.

12. THE CASE OF RUSSIA

In 1917 Russia was an undeveloped country. It had suffered enormous losses from the first and second world war. The situation is now completely different. The standard of living continues to be lower than that of United States and some other highly developed countries; but in military power it competes with them; and military power is now impossible, without a high level of development.

But it is difficult to conciliate government enterprise with efficiency, more especially in agriculture. Moreover governments imposed farmers compulsory contributions, instead of giving them impulses to produce. Climate is far from being favourable. And agriculture has been always the weak point of Russian economy.

13. THE CASE OF CHINA

On the contrary the Chinese revolution has been a revolution of peasants. And peasants could not take measures against themselves. Land has been given to peasants, who were cultivating it, at the beginning collectively, and then more and more individually; big state or collective farms have not sense, when land is scarce. Moreover dwarf rices of high productivity, and other technologic advances have been introduced. And China solved its problem of hunger; in spite of the rapid increase of population, it produces sufficient cereals to feed its agricultural and urban population.

14. THE CASE OF INDIA

In India the measures taken to favour peasants have not been so radical as in Greece; moreover there is not sufficient land to make all peasants proprietors. During the last 100 years grains production was always increasing more rapidly than population (Papadakis 1967), but the country was suffering famines periodically.

An American agronomist, the nobelist Norman Borlaugh, created in Mexico dwarf wheats, that give very high yields, when grown irrigated with fertilizers. And since the climate of the wheat region of India and Pakistan is similar to that of NW Mexico, where Borlaugh was working, he proposed to the governments of India and Pakistan to introduce enormous quantities of seed, and sow immediately

millions of hectares, with 120 kg/ha of nitrogen and 60 of phosphorus (P_2O_5) per ha.

India and Pakistan have great number of scientists with world wide prestige, both native and British. Almost unanimously they rejected Borlaugh proposition, saying, that «we had carried out thousands of experiments, and we cannot propose nothing; how a man who has never worked in India and has not carried out experiments, except a few trials, can give so precise receipts and pretend revolutionize our agriculture?». The international scientific establishment was also expecting the failure of Borlaugh propositions. In spite of that, both governments adopted the proposals of Borlaugh; enormous quantities of seed have been introduced, farmers adopted with enthousiasm the new varieties and fertilizers, and wheat production has been increased by 18 millions tons, annually. Now the increase is estimated at 28 millions tons. Farmers not only adopted the new varieties, but they opened wells to increase irrigated land, and sow the new varieties. Following the example of Borlaugh the International Institute of Rice in Manilla, Philippines, has produced dwarf varieties of rice, which have been introduced in India, China, Colombia, and other countries, and increased considerably yields.

Concerning the response of hindou farmers, Borlaugh says, that they are analphabet, but they calculate exactly the benefit they will have sowing the new varieties. The same thing has been observed in Greece, and everywhere; one often encounters analphabet people with admirable common sense; they not only adopt new technology, but they apply it intelligently, and they do interesting observations.

15. THE CASE OF UNITED STATES, CANADA, AUSTRALIA

In United States, before independence, northern states were practising subsistence agriculture; southern states were producing cotton and other agricultural commodities, with slaves imported from Africa; the adqisitive power of slaves was naturally almost zero; but that of whites considerable; moreover they were buying sometimes food to feed their slaves. *Non agricultural goods were imported from England, and that was naturally retarding economic development.*

A little after independence, farmers of northern states began to migrate to the midwest. The vegetation there is grassland, so that each farmer could have a great

number of horses, cultivate much land, and have a big income; moreover prairies were permitting them to develop livestock breeding; they were becoming rapidly proprietors of the land they were cultivating, so that they had not to share their crops with a landlord. A big market for non-agricultural goods has been created; industrial development was so rapid, that there was shortage of labour.

In the middle of 19th century, Europe was suffering a serious agricultural crisis; Zola in his novel «La Terre» describes the life of peasants at that epoch. Immigrants from Central Europe colonized the middle West; and some of them settled as workers in cities. When agriculture in Europe began to be protected, the slaves of southern states have been liberated and some of them began to migrate to northern states; moreover immigrants from Mediterranean Europe began to arrive; their affluence was such, that measures have been taken in 1920 to stop it.

It is to be noticed, that United States is practically the only country in which peasants have been always proprietors of the land they were cultivating. Moreover, having many horses, they were cultivating extensive areas, and working for the market. In the southern states, there were plantations working with slaves; but these plantations were producing for the world market, earning foreign money for the country.

The cases of Canada and Australia are similar. Farmers were practically always proprietors of the land they were cultivating, and working for the market. The chief difference is, that these countries were not independent, and could not protect their industry so deliberately as United States. Moreover these countries have been colonized later, and their climate is less propitious (cold in Canada, desertic in Australia).

16. THE CASE OF LATIN AMERICA

The fauna of America, north and south, had not horses, cattle, sheep, goats. So that farmers were obliged to cultivate crops with their hands, and livestock breeding could not be developed. That is why only the high mountains and deserts, where the struggle against adventitious vegetation is easier, were populated; the rest of the two continents was practically inhabited, at the arrival of the Europeans.

Agriculture has been invented separately in the Americas, with maize and

potato as the principal crops. A feudal system, like that of the old world, was prevailing; peasants were sharing their production with feudal lords. But since land was cultivated by hand, production per capita was very low, the majority of population was living in extreme poverty; and cultural evolution was also slower.

United States has been colonized by generally poor people, searching religious freedom, or escaping poverty. Latin America has been conquered by «conquistadores» (conquerors searching gold and feudal power). Instead of eliminating native people, the conquerors used them as serfs or slaves, to mine gold and other metals, and cultivate plantations, etc. That is why they preferred inhabited regions, Peru, Bolivia, Ecuador, Colombia, Venezuela, Central America, Mexico. In regions void of population, Brazil, Caribe, they imported slaves from Africa.

Food was only produced to feed the population; industrial goods were imported from Europe. In Spanish colonies Spain was not permitting neither the establishment of industries, nor importation from countries other than Spain. After independence the market of Spanish America has been open to all countries, more especially England. But due to the feudal system, the acquisitive power of peasants was minimal, moreover importation was not restricted, and industrial development was very slow.

The two world wars interrupted importation, moreover nationalism advanced, and all that favoured industrialization. However division in small countries not self-sufficient retarded growth.

The case of Argentina and Uruguay is special. The «Pampean» region, bigger than France, is probably the best of the world for livestock breeding, and grain crops, which were badly needed in Europe during the 19th century, and beginning of 20th. Cereal harvest was requiring much man power, and many people were arriving, chiefly from Italy, to work in cereal harvest (*migración golondrina*). Little by little they have been established in the *estancias* (big properties of many thousands hectares) as share-croppers. The acquisitive power of the big proprietors (*estancieros*) was high, but that of the share holder's negligible. Therefore industrial development was slow; the *estancieros* were living in Paris; importation was not restricted. But during the two world wars importation has been interrupted; moreover nationalism developed; inflation combined with an adequate policy made share croppers proprietors of the land they were cultivating; other mea-

tures have increased the acquisitive power of workers. All that combined with restriction of importations, resulted in rapid industrial growth.

But protection of agriculture and technologic progress in Europe make it exporter of cereals and livestock products; Argentina and Uruguay lost their market. Fortunately Russia and Japan buy some cereals, but prices in the international market are very low. Moreover during several years Argentina has applied a policy, not only favouring but subsidizing foreign imports; and during this period foreign debt increased several times, creating a very difficult situation.

For all these reasons development of Latin America has been much slower than that of United States. But these countries had never suffered the famines of other undeveloped countries.

17. THE CASE OF AFRICA SOUTH OF SAHARA

In the European colonies south of Sahara, Europeans promoted the production of metals, sugar, rubber, etc., in mines and plantations, own by foreigners, in which Africans were working almost as slaves. Outside plantations subsistence agriculture prevails, peasants are marginated from the national market. Even the food consumed by miners and peasants working in plantations is often imported from abroad; imports were not restricted; all that was impeding economic development.

But in the french and english colonies of West Africa, plantations were prohibited. The cacao, peanut, etc., these countries are exporting, is produced by peasants; this fact introduced a little these peasants into the market, and some development is observed; something analogous is observed in southeast Africa, where peasants are producing cereals to feed miners.

When these countries became independent, a great number of adventurers, offering goods, services, etc., have inundated these countries. These adventurers pushed governments to prestige investments, luxurious buildings, big industry, air lines, etc.) with foreign loans. A numerous bureaucracy has been formed, and for «prestige» reasons they were paid the same salaries, as the few employees of colonial administration, higher than those paid in Europe. All that resulted in a migration of people from agriculture to the cities; the demand of food has greatly increased, but such demand was satisfied with imported food; importation of no-a-

gricultural goods was also unrestricted. When harvests were bad, big quantities of foreign grains were imported, ruining national production. Granted food alleviates difficult situations, but perpetuates famines. Now these countries are deeply in debt, the prices of raw materials low, and development is almost impossible.

18. CONCLUSIONS

We may conclude, that demand is a *sine qua non* condition of development; without demand, it is impossible. Investment is also necessary, but usually soon or later the necessary capital is encountered, when there is demand. Naturally rapid industrialization is impossible without massive importation of capital goods from abroad. But we can obtain an important and steady rise of the standard of living, without it. Moreover if the plan of Angelopoulos (1984) were applied, even rapid development would be possible.

To obtain development we should terminate with subsistence agriculture, making peasants owners of the land they are cultivating, buying grains directly from the peasants at reasonable prices, and paying them with cheques on the bank, which carries out agricultural credit; that permits the bank to give farmers at credit, fertilizers, seeds, herbicides, etc. Moreover well oriented agricultural research should be carried out, to find low cost methods that increase production. Irrigation works help also much, where they are necessary, and economically possible. Naturally a restriction of foreign imports is necessary; otherwise the demand of goods is satisfied with imported goods. The system of clearing applied by Germany before the second world war, can be applied. It is necessary to understand, that a country cannot increase continuously its imports, without increasing also its exports; the system of clearing, which may be multilateral, increases equally imports and exports, and will increase considerably international commerce.

The Greek model of Papanastasiou-Koryzis gave excellent results in Greece; analogous measures had been taken with great success in Japan previously; China and India solved their problems of hunger; all that shows, that with adequate measures the problem of development of undeveloped countries can be solved. The greater obstacle is the prevailing dogmatism, and slogans.

The enormous increase of productivity with technologic progress in developed countries created an unprecedented situation; the problems of developed

countries are now very different from those of undeveloped ones; and we cannot apply the same measures. Instead of applying groundless dogmas and slogans, we should revise the prevailing theories on the basis of facts.

LITERATURE CITED

- A. Angelopoulos, Un plan mundial pour l'emploi, Paris 1984.
- N. E. Borlaugh, Mejoramiento del Trigo; su Impacto en el Abastecimiento Mundial de Alimentos. 3rd Intern. Symposium of Wheat Genetics, Canberra 1968.
- J. M. Keynes, The general Theory of Employment, Interest and Money, London 1934.
- J. Papadakis, The Agricultural Policy of Government, more especially in relation to Cereals. In greek, Economic Yearbook of Greece, 1934.
- , Agricultural Development. A Change of Methods is Urgently Needed, Roma-Buenos Aires, 1965
- , The food Problem of India, Roma-Buenos Aires 1967
- , Inflation and Development Economics, Roma-Buenos Aires, 1967
- , Problems of Our Time, Buenos Aires 1969
- , Viaje al Futuro, Buenos Aires 1972
- , El Problema Mundial del Hambre, Buenos Aires 1981
- , Inflación, Desempleo, Desarrollo y Soluciones Posibles, Buenos Aires 1981
- , Origins and Possible Solutions of Our Days Economic Crisis, Athens 1983
- , Economic Theory Based on Facts, Athens 1984
- , The agricultural and economic miracle realized in Greece(1922-1982). Lessons for foreign countries and us. Proceedings of the Academy of Athens, 1983, in greek, 556-580
- X., Zolotas Economic Growth and Declining Social Welfare, New York 1982

ΠΕΡΙΛΗΨΗ

Ἡ αὐξηση τοῦ εἰσοδήματος τῶν γεωργῶν βάσει τῆς οἰκονομικῆς ἀνάπτυξης,
τὸ «ἐλληνικὸ μοντέλο» τῶν Παπαναστασίου-Κορυζῆ

Περισσότερο ἀπὸ τὸ μισὸ τῆς ἀνθρωπότητας ζοῦνε σὲ χῶρες μὲ ἀκαθάριστο ἐθνικὸ προϊόν μικρότερο ἀπὸ 250 δολλάρια, 30 φορές μικρότερο ἀπὸ ἐκεῖνο τῶν Ἠνωμένων Πολιτειῶν. Πολλὲς προσπάθειες ἔγιναν τὰ τελευταῖα 40 χρόνια γιὰ νὰ ἀναπτυχθοῦν αὐτὲς οἱ χῶρες, ἀλλὰ δὲν ἔφεραν ἀποτέλεσμα σχεδὸν πουθενά.

Στην αρχή του αιώνα ή 'Ελλάδα επίσης ήταν σχεδόν ύποανάπτυκτη. 'Αλλά μεταξύ 1930 και 1980, εκτός βέβαια από τὰ 10 ἔτη τῶν πολέμων, ἡ 'Ελλάδα εἶχε τὴν ταχύτερη γεωργικὴ καὶ οἰκονομικὴ ἀνάπτυξη ἀπὸ ὅλες σχεδὸν τὶς ἄλλες χῶρες. Τὰ μέτρα ὅμως ποὺ ἐφαρμόστηκαν στὴν 'Ελλάδα, τὸ «ἐλληνικὸ μοντέλο τῶν Παπαναστασίου Κορυζῆ» εἶναι σχεδὸν ἄγνωστα στὸ ἐξωτερικὸ, καὶ σκοπὸς τῆς ἀνακοίνωσης εἶναι νὰ τὸ κάνει γνωστὸ, καὶ νὰ δείξει τὰ διδάγματα ποὺ μποροῦν νὰ βγοῦν γιὰ τὴν ἀνάπτυξη ἄλλων χωρῶν.

'Αλλὰ τὰ ζητήματα αὐτὰ δὲν εἶναι ἀνεξάρτητα τόπου καὶ χρόνου. Γιὰ τὸ λόγο αὐτὸ γίνεται σύντομη ἐπισκόπηση τῆς οἰκονομικῆς ἱστορίας τοῦ κόσμου ἀπὸ τὴν ἐφεύρεση τῆς γεωργίας ἕως τὴν βιομηχανικὴ ἐπανάσταση (παλαιὸ κόσμος, 'Αμερικὴ, Αὐστραλία, ἐλληνικὰ κράτη-πόλεις, 'Ελληνιστικὴ, ρωμαϊκὴ, βυζαντινὴ καὶ ἀραβικὴ ἐποχὴ, καὶ τὶς εὐρωπαϊκὲς πόλεις Βενετία, Γένοβα, κ.λπ.). Καθὼς ἐπίσης τοῦ τρόπου, μὲ τὸν ὁποῖο ὀρισμένες χῶρες ('Ιαπωνία, Ρωσία, Κίνα, 'Ινδία, 'Ηνωμένες Πολιτεῖες, Λατινικὴ 'Αμερικὴ, μὲ τὴν εἰδικὴ περίπτωση τῆς 'Αργεντινῆς, 'Αφρικὴ νοτίως τῆς Σαχάρας) πέτυχαν ἢ ἀντιμετώπισαν τὴν ἀνάπτυξή των.

Οἱ σύντομες αὐτὲς ἐπισκοπήσεις, δείχνουν, ὅτι δὲν εἶναι δυνατὴ οἰκονομικὴ ἀνάπτυξη, ὅταν οἱ χωρικοὶ δὲν εἶναι ἰδιοκτῆτες τῶν γαιῶν ποὺ καλλιεργοῦν, καὶ κάνουν γεωργία αὐτοσυντήρησης, μὴ μετέχοντες στὴν ἀγορά. 'Επὶ πλεόν ἡ οἰκονομικὴ ἀνάπτυξη ἐξαρτᾶται πολὺ ἀπὸ τὴν παραγωγικότητα τῆς γεωργίας. Γιὰ τοὺς λόγους αὐτοὺς ἡ αὔξηση τῆς ἀγοραστικῆς ικανότητος τοῦ γεωργικοῦ πληθυσμοῦ, ποὺ ἀποτελεῖ τὴν πλειονότητα στὶς ὑποανάπτυκτες χῶρες, εἶναι ἀπαραίτητη προϋπόθεση τῆς ἀνάπτυξης. 'Αλλὰ ὅταν ἡ εἰσαγωγὴ ξένων προϊόντων δὲν ἐμποδίζεται, ἡ αὔξηση τῆς ἀγοραστικῆς ικανότητος μπορεῖ νὰ ικανοποιηθεῖ μὲ εἰσαγωγές, καὶ ἀντὶ «ἀνάπτυξη ἔχομε αὔξηση τοῦ ἐξωτερικοῦ χρέους. Τὸ σύστημα τοῦ «clearing» ἐπιτρέπει νὰ ἀποφευχθεῖ αὐτό, καὶ νὰ αὐξηθεῖ τὸ διεθνὲς ἐμπόριο.

Φυσικὰ γιὰ γρήγορη ἀνάπτυξη χρειάζονται ἀγαθὰ κεφαλαίου, καὶ ἓνα σχέδιο, ὅπως ἐκεῖνο ποὺ πρότεινε ὁ συνάδελφος 'Αγγελόπουλος, συνδυασμένο μὲ τὰ ἀνωτέρω μέτρα, θὰ ἐπιτάχυνε τὴν ἀνάπτυξη.