

- KATZ M. 1982. »Government Policy, External Public Indebtedness, and Debt Services«. *IMF Document DM/82/19*.
- KHARAS H. 1981. »Constrained Optimal Foreign Borrowing by Less Developed Countries«. *World Bank Domestic Finance Study No. 75*, Washington, D. C.: World Bank.
- KHARAS H. 1981. »On Structural Change and Debt Servicing Capacity«. *World Bank Domestic Finance Study No. 74*. Washington, D. C. World Bank.
- KING B. B. 1968. »Notes on the Mechanics of Growth and Debt«. *World Bank Staff Occasional Paper No. 6*. Washington, D. C.: World Bank.
- KNIGHT P. T. 1983. »Economic Reform in Socialist Countries«. *World Bank Staff Working Paper No. 579*. Washington, D. C.: World Bank.
- KRUEGER A. O. 1983. »The Effects of Trade Strategies on Growth«. *Finance and Development*, June 1983.
- MENDELSON M. S. 1983. »Commercial Banks and the Restructuring of Cross-Border Debt«. Group of Thirty Occasional Papers, New York.
- MCDONALD D. C. 1982. »Debt Capacity and Developing Country Borrowing: A Survey of the Literature«. World Bank Paper.
- MORGAN GUARANTY 1983. »Global Debt: Assessment and Long-term Guaranty Strategy«. *World Financial Markets: Morgan Guaranty June 1983*. New York.
- NOWZAD B. 1982. »Some Issues and Questions Regarding Debt of Developing Countries«. In: *Killick T. »Adjustment and Financing in the Developing World*«, IMF and Overseas Development Institute (London). Washington, D. C.
- OECD 1982. »Yugoslavia — Economic Survey 1981—1982. *OECD*. Paris.
- OECD 1983. »Yugoslavia — Economic Survey 1982—1983. *OECD*. Paris.
- RIEDEL J. 1983. »Trade as the Engine of Growth in Developing Countries — A Reappraisal«. *World Bank Staff Working Paper No. 555*. Washington, D. C.
- RIEDEL J. 1983. »Determinants of LDC Borrowing in International Financial Markets: Theory and Empirical Evidence«. Johns Hopkins University — not yet published.
- UNCTAD 1983. »Review of Arrangements Concerning Debt Problems of Developing Countries«. *Report by the UNCTAD Secretariat*. Geneva.
- WORLD BANK 1982. »Yugoslavia: Adjustment Policies and Development Perspectives«. Volume I, II, and III. *Document of the World Bank*. Washington, D. C.: World Bank.
- WORLD BANK 1981. »World Debt Tables — External Debt of Developing Countries«. Washington, D. C.: The World Bank.
- WORLD BANK 1982—83. »World Debt Tables — External Debt of Developing Countries«. Washington, D. C.: The World Bank.

AN ANALYSIS AND FORECAST OF DEMAND FOR FOOD IN IRAN

Mahmood YOUSEFI* and Sohrab ABIZADEH*

I. INTRODUCTION

In the last two decades, Iran's per capita food consumption has grown dramatically. During the 1960—77 period, for instance, not only did the rate of growth of food production fail to keep pace with the rate of growth of demand, but the food productivity growth rate in agriculture fell far behind that of other sectors as well.

Given the experience of the recent past, it is reasonable to expect that the size of the food gap (the difference between demand and supply) will grow absolutely and relatively in view of the expanding population in Iran. This gap will be even larger if there is an attempt to increase food consumption in order to improve living standards. In the immediate pre-revolutionary period the government was able, for over a decade, to finance imported food through oil revenues. This policy is no longer viable on a sustained basis. Given that the Iranian economy can basically be characterized as a one-crop (oil) economy, the food-import strategy does not seem to be a viable long-run solution.

This paper addresses itself to an alternative policy. It is argued that, as a matter of development strategy, more attention should be paid to the rate of productivity in agriculture. The model presented here focuses on the demand size of the problem. Given information with respect to the demand growth rate, the minimum required rate of growth of supply can be specified for a given time horizon.

The desirability of development policies designed to promote food self-sufficiency is discussed in the following pages. Next, a simple dynamic model is suggested, and empirical evidence pertaining to the model is presented. Finally, some conclusions and policy recommendations are presented.

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II. THE DESIRABILITY OF SELF-SUFFICIENCY

In the pre-revolutionary period, with the exception of the Fifth National Development Plan, agriculture received a low priority in all plans. Until 1973, the onset of the Fifth National Development Plan, a large portion of investment expenditure devoted to agriculture was absorbed in the construction of several major dams. This deliberate neglect meant that the country had become a net importer of food by the late 1960's. By 1976 Iran was importing almost 40 percent of its annual food needs from abroad. The increase in the size of the food gap prompted a »determination to stress productivity and to maximize self-sufficiency in agriculture« (Weinbaum, 1977:434).

The new post-revolutionary regime continues to propagate the need for self-sufficiency. This may stem from the fact that: a) the availability of hard currency to finance a substantial food deficit is subject to a considerable amount of uncertainty, b) failure to devote attention and resources to agriculture will worsen the already high rate of unemployment and underemployment, c) forestalling economic »dependency« would otherwise be very unlikely. Given the current high rate of population growth (2.8 percent in 1981) and consumer expectations, it is likely that the demand for food will at least not decline. The dwindling oil income will enable the country to buy time before the stagnant agriculture is revamped.

Theoretically speaking, a strong case may be made for efficiency considerations in the decision process. If the »appropriate« discount rate is used, the optimal rule requires that the discounted present value of benefits of resources allocated to agriculture should be greater than (or at least equal to) the discounted present value of costs. All those projects with a positive net present value are efficient. If there are several mutually exclusive projects and the decision-maker is faced with a capital constraint, then the optimal procedure is to maximize the net present value subject to the capital constraint.¹ The authors believe that the practical scope of any cost-benefit analysis in the context of Iranian agriculture is extremely limited due to the following reasons.

First, in response to a system of price subsidies, at both producer and consumer levels, market prices are extremely distorted. Input price subsidies for seeds, fertilizers, and irrigation water have been in effect for some time. Farm credits have traditionally been allocated at subsidized rates. Food price support programs for a wide range of foodstuffs such as rice, poultry, dairy products, and sugar are designed to subsidize the general consumer and subvert dramatic price increases. Shadow prices are designed to overcome the problem of distorted market prices, but there still remains the practical problem of measurement.

Second, realistically speaking, it is not possible to measure the social rate of return when money and capital markets are segmented into two subsectors: the organized and non-organized. Frequently,

¹ See (Due, 1977:444).

the disparity between the prevailing interest rates in these submarkets varies from 5 to 20 percent.²

Given the objective of food self-sufficiency purported by the new regime, the authors take the position that it is desirable to pursue a policy of agricultural revitalization. A by-product of agricultural development will be an improvement in the living standard of the rural communities where approximately one-half of the population reside. The disparity in rural-urban income has become serious in recent years. For instance, during the early 1970s urban-rural differentials in per capita income had grown to a 5:1 ratio (International Labor Organization, 1973). In pursuing the objective of self-sufficiency other sectors of the economy need not be neglected. Rather, a restructuring of priorities is a must. It is imperative that fewer resources are devoted to the inefficient import-substituting manufacturing sector and more allocated to agriculture.³

III. THE MODEL

It is the objective of the following model to determine the rate of growth of production required to keep pace with the expanding demand for food. We begin from a prevailing gap between the demand for and the supply of food at time zero. Symbolically,

$$D_0 > S_0$$

where the subscript 0 refers to the initial period. All symbols including D and S are defined below. The gap between D and S is closed by importing food from abroad, or

$$(1) \quad D_0 = S_0 + M_0$$

It is assumed that the objective of the policy-maker is to deemphasize imports so that by target date T

$$(2) \quad D_T = S_T$$

In Figure 1 below, S_t and D_t schedules are shown to be increasing functions of time. The initial value of D ; i.e., D_0 exceeds that of S . However, S_t approaches D_t asymptotically. Hence the gap between the two is closed at T . For this to occur the rate of growth of S_t must exceed that of D_t in the intervening period. That is,

$$k > h \text{ for all } t = 1, 2, \dots, T.$$

² This disparity is expected to be even more pronounced in the post-revolutionary period where interest rates are frowned upon.

³ In a forthcoming paper, the authors discuss why self-sufficiency in agriculture is feasible. For details, see (Walter, 1975); (LeBaron, 1970); and (Aresvilk, 1976).

If a shorter time horizon such as T^* is chosen, then the relevant supply schedule is S_t . Clearly, under these circumstances, a higher rate of growth of S is required.

The value of D_t and D_0 are hypothesized to be related as follows:

$$(3) D_t = D_0 (1 + h_t)^t$$

In order to estimate the initial value of h in equation (3) the following demand function is utilized.⁴

$$(4) D = f\left(\frac{Y}{P}, P_f, N\right)$$

Equation (4) may be rewritten as

$$(5) D = g(y, P_f, N)$$

Totally differentiating equation (5) and performing proper algebraic manipulations, we obtain

$$(6) dD = \frac{\partial g}{\partial y} \cdot dy + \frac{\partial g}{\partial P_f} \cdot dP_f + \frac{\partial g}{\partial N} \cdot dN$$

$$(7) \frac{dD}{D} = \frac{\partial g}{\partial y} \cdot \frac{y}{D} \cdot \frac{dy}{y} + \frac{\partial g}{\partial P_f} \cdot \frac{P_f}{D} \cdot \frac{dP_f}{P_f} + \frac{\partial g}{\partial N} \cdot \frac{N}{D} \cdot \frac{dN}{N}$$

Equation (7) may be rewritten as

$$(8) \frac{dD}{D} = h = \eta \cdot i + \xi \cdot \rho + \sigma \cdot n$$

We are interested in the initial value of income elasticity of demand, i.e., η_0 . Hence, ordinary least squares (OLS) regression analysis is applied to estimate the coefficients in (8) including η_0 . It is reasonable to expect that η falls over time as real income increases, that is as the living standard improves. The size of η at any time is assumed to be a fraction of its initial value; that is,

$$(9) \eta_t = \gamma \eta_0, \text{ where } \gamma < 1 \text{ by assumption.}$$

Notations and Definitions:

D = demand for food
 S = supply of food
 M = food imports
 t = time

⁴ The demand function is hypothesized to be a function of own price, real income, and population where the latter two serve as shift factors. Since the variables are in aggregate form, other shift factors such as taste, income distribution, etc. are subsumed in real income and population variables.

N = population

Y = nominal income

P = general price index

P_f = food price index

Y

$y = \frac{Y}{P}$ or real income

P

ρ = the rate of growth of P_f

h = the rate of growth of D

k = the rate of growth of S

i = the rate of growth of y

n = the rate of growth of population

η = income elasticity of demand

γ = the rate of change of η

ξ = price elasticity of demand

σ = the proportion of h absorbed by n

δ = the rate of change of n

λ = the rate of change of i

Different scenarios with respect to the behavior of i and n may be adopted in order to be able to forecast the values of both h and D . It is reasonable to expect that the unusual high rate of growth of income of the recent past not only will not continue but instead will fall.⁵ This implies that i_t may be simply stated as

$$(10) i_t = \lambda i_0, \text{ where } \lambda < 1 \text{ by assumption.}$$

The rate of growth of population through time is hypothesized to fall in accordance with the following formulation

$$(11) n_t = n_0 (1 + \delta)^t, \text{ where } \delta < 0$$

Substituting (11), (10), and (9), into (8) we obtain

$$(12) h_t = \lambda \gamma \eta_0 i_0 + \xi \cdot \rho + \sigma n_0 (1 + \delta)^t$$

The value of D at any time t can be calculated by substituting h from (12) into (3). That is,

$$(13) D_t = D_0 [1 + \lambda \gamma \eta_0 i_0 + \xi \cdot \rho + \sigma n_0 (1 + \delta)^t]^t$$

Once D_t has sufficiently fallen and S_t sufficiently risen, M_t approaches zero and equation (2) will be satisfied. The speed with which M approaches zero depends on the size of k relative to h . The higher the value of k for a given h , the faster excess demand is removed. Also the lower the size of h for a given k , the faster M approaches zero.

⁵ The dramatic rises in national income, in the pre-revolutionary years, were mainly derived from oil revenues. Oil income is not rising at present.

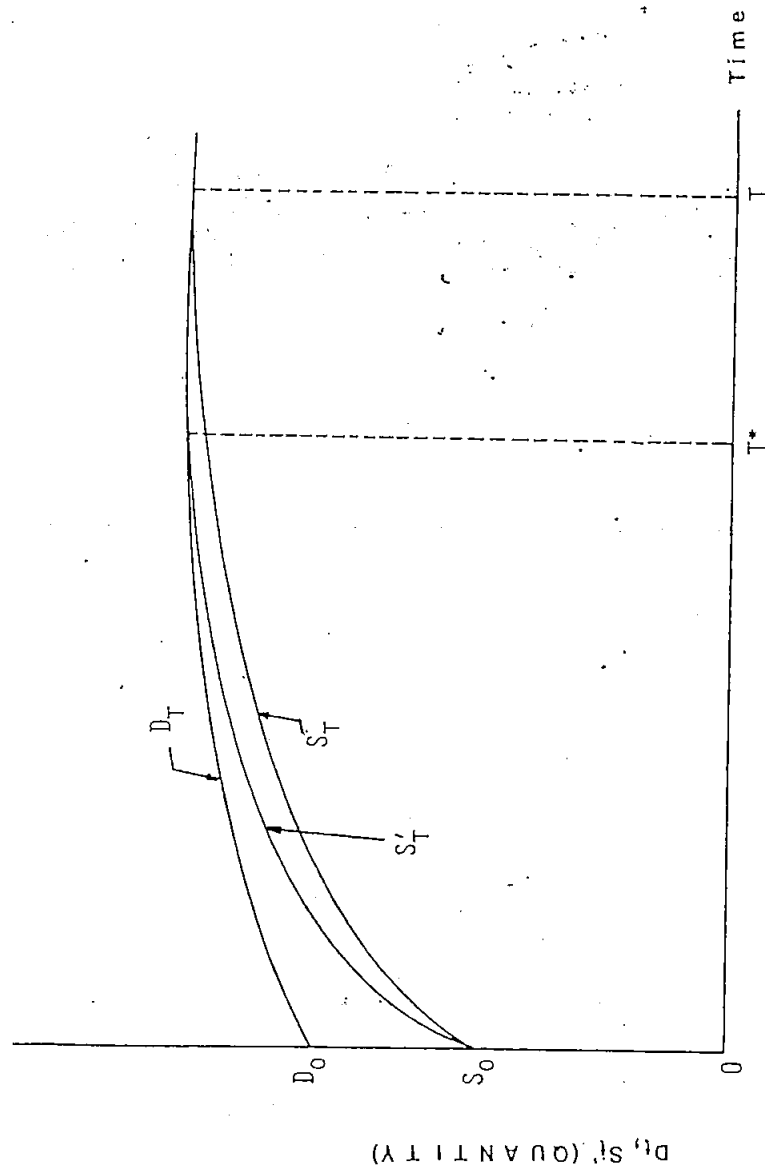


Figure I — Quantity of food over time.

IV. EMPIRICAL RESULTS

In order to estimate the initial value of income elasticity of demand six regression equations using relevant time series data (1958—77) were employed. Table I summarizes the results of these regression equations. The dependent variables are, respectively, aggregate demand growth rate for food (equations 1 & 2), demand growth rate for meat (equations 3 & 4), and demand growth rate for wheat (equations 5 & 6). Equations 2, 4, and 6 incorporate price as an independent variable. The regression equations display the expected theoretical signs. Further, most coefficients are highly significant. As evident from Table I, the inclusion of price as an independent variable does not significantly alter the explanatory power of the model. For this reason, p is ignored when a forecast is made.

The primary purpose of the regression analysis is to obtain an estimate of the coefficients of income elasticity.⁶ These coefficients are in turn substituted in equation (13) of the model. Using different scenarios with respect to population and income, D_t and hence h_t may be forecasted. An optimistic population scenario would call for a $\frac{1}{2}$ of one percent fall in the population growth rate (from the initial level of 2.8 percent) within the forecast period, 1982—1993. This would imply that for an unchanged mortality rate, the population growth rate, n , would be equal to 2.3 percent by 1992. To accomplish this objective it is necessary that less than one-half of one birth per thousand be prevented each year.⁷ A pessimistic population scenario would require no change in the population growth rate within the forecast period. This is not too unrealistic given the attitude of the clergy-run government concerning birth control practices.⁸

The growth rate of real income (\dot{y}_0) was 7.5 percent in 1976. It is assumed that this rate will continuously fall so that by 1992 it will be 2.5 percent. The value of income elasticity of demand, i.e., η , is assumed to be halved within the forecast period. The initial value of $\eta (= \eta_0)$ is estimated to be 0.37. (See Table I).

⁶ The coefficients are acceptable if they are not completely at variance with those obtained for countries with comparable levels of per capita income. The projected income elasticity coefficient for the EEC countries and Japan, in 1971, was respectively 0.08 and 0.13. See (Food and Agricultural Organization, 1976); (Clark and Haswell, 1966); (Mellor, 1966); and (George and King, 1971).

⁷ The Family Planning Program, a national scheme to promote population control, was established in 1971. One of the objectives of the program was to reduce the population growth rate by 2 percent within a twenty-year period. For details, see (Moore, 1974).

⁸ According to the *Demographic Yearbook* (United Nations, 1981: P. 169) the mid-year estimate of the population growth rate in 1981 was 2.8 percent. That year is the last year for which demographic data are available. The authors believe that this rate will continue for the foreseeable future.

TABLE I.
Table of Regression Analysis for the Rate of Growth of Demand

Equation	Dependent Variable	Independent variables				R ²	F-ratio	DW St.
		Constant	i	n	ρ			
1	Food (aggregate)	0.52	0.37 ^a (0.23)	2.30 ^b (1.92) ^d		0.20	2.14	1.78
2	Food (aggregate)	0.51	0.36 ^b (0.27)	2.35 ^a (0.03)	-0.03 ^b	0.25	1.32	1.69
3	Meat	7.8	0.76 ^c (0.32)	1.5 ^b (1.4)		0.48	4.32	2.12
4	Meat	9.3	0.46 ^b (.21)	2.09 ^c (0.87)	-0.44 ^b	0.48	2.27	2.13
5	Wheat	0.77	0.18 ^b (.16)	3.30 ^c (1.4)		0.33	3.24	1.67
6	Wheat	0.63	0.21 ^b (0.12)	2.30 ^c (0.87)	-0.52 ^b	0.37	3.18	1.64

Notes: a. significant at 95 percent confidence level; b. significant at 85 percent confidence level; c. significant at 99 percent confidence level; d. figures in parenthesis are the standard error of the regression coefficients.

With the above assumptions, projections are made with respect to h and the required k that would bring S and D into equality. Tables II and III summarize the time pattern of h_t and k_t for aggregate food commodities. The rate of growth of supply for 1973—76 was reported to have been 3.2 to 3.6 percent.⁹ According to our projections, and using an optimistic population scenario, the rate of growth of demand will fall to 3.2 percent in 1987, the terminal year of forecast. The same demand growth rate will fall to 3.6 percent using a less optimistic population scenario (see Table II). These moderate growth rates in D would allow for marginal improvements in food consumption above and beyond the required rate of growth called by population increases. If S_t is to equal D_t within five years, the required rate of growth of k is much higher than it otherwise would be. The attainment of the equality of S_t and D_t within a five-year time horizon is too ambitious and is unlikely to materialize. However, it is possible for the convergence of S_t and D_t to occur within an expanded time horizon. Table III depicts the necessary k for alternative population scenarios. The required k would decline over the forecast period from the initial value of above 7 percent to a terminal value of 3 percent.

Formidable problems still face policies aimed at accomplishing even this moderate rate. Some of these problems stem from the phy-

sical characteristics of the rural landscape. Others deal with the rigid conditions of production and an inadequate rural infrastructure. The prevailing political uncertainty, particularly the ambiguity concerning potential land reforms and property rights, makes the task of rural development exceedingly difficult.¹⁰ On the other hand, political uncertainty is transitory and, in the meantime, it will have a dampening effect on aggregate demand for food. The likelihood is that any shortfall of the supply growth rate will be offset by a corresponding fall of the demand growth rate.

V. SUMMARY AND CONCLUSIONS

Prior to 1977, the agriculture sector of the Iranian economy did not receive as much attention as did the manufacturing sector. The authors believe that the need to emphasize self-sufficiency in food production is justified on both economic and pragmatic grounds.

TABLE II.

The Projected Rate of Growth of Demand and the Required Rate of Growth of Supply: A Five-Year Forecast

Years	Optimistic Population Scenario		Pessimistic Population Scenario	
	h (percent)	k (percent)	h (percent)	k (percent)
1981—82	6.60	7.30	6.90	7.40
1982—83	5.90	6.19	6.30	6.40
1983—84	5.10	5.25	5.40	5.55
1984—85	4.30	4.45	4.60	4.80
1985—86	3.80	3.77	4.20	4.16
1986—87	3.20	3.20	3.60	3.60

In this paper a simple demand model is proposed. With the help of the model, the rate of growth of demand for and the required rate of growth of supply of food under alternative time-horizons are projected. It is shown (tentatively) that if self-sufficiency is to be achieved within five years, the supply growth rate would have to accelerate far above the 1973—75 annual growth rate of 3.2 percent. This is an unlikely event given the existing agricultural production rigidities and political uncertainties. Alternatively, the convergence of supply and demand could occur with an expanded time horizon. Within an eleven-year time horizon the demand growth rate will fall in accordance with the assumptions of the model. It is very likely that the demand growth rate will fall below the projected rate of the model in response to political and economic dislocations of the post-revolutionary era.

¹⁰ For a discussion of some of the recent difficulties, see (Afshar, 1981: 1104—1106).

⁹ See (Weinbaum, 1977:436).

TABLE III.

The Projected Rate of Growth of Demand and the Required Rate of Growth of Supply: A Ten-Year Forecast

Years	Optimistic Population Scenario		Pessimistic Population Scenario	
	h (percent)	k (percent)	h (percent)	k (percent)
1981—82	6.60	7.30	6.90	7.40
1982—83	5.90	6.68	6.30	6.76
1983—84	5.10	6.11	5.40	6.18
1984—85	4.30	5.59	4.60	5.64
1985—86	3.80	5.11	4.20	5.16
1986—87	3.20	4.68	3.60	4.71
1987—88	3.00	4.28	3.50	4.30
1988—89	2.87	3.92	3.31	3.93
1989—90	2.73	3.58	3.13	3.59
1990—91	2.61	3.28	2.96	3.28
1991—92	2.50	3.00	2.80	3.00

It is also possible that economic dislocations such as the virtual shutdown of industrial plants and the consequent high unemployment rate will adversely affect aggregate demand. In such circumstances, if the pre-revolutionary rate of growth of supply of food commodities is doubled initially, convergence of S_t and D_t is a likely event within a longer time-horizon.

It should be noted that the foregoing conclusions are contingent upon the re-emergence of political stability and conditions conducive to the enforcement of property rights. Further, since pre-revolutionary data were used to make projections, the results of this study are not conclusive. As new and more disaggregated data become available, the results should be re-examined.

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APPENDIX I Sources of Data

Different issues of the following sources were used:

1. Bank Markazi Iran, *Annual Report and Balance Sheet*.
2. _____, *National Income of Iran*.
3. _____, *Bulletin*.
4. International Monetary Fund, *Financial Statistics*.
5. United Nations, *Statistical Yearbook*.

6. _____, *Yearbook of National Account Statistics*.
7. _____, *Yearbook of International Trade Statistics*.
8. _____, *Demographic Yearbook*.

REFERENCES

- Afshar, H. »An Assessment of Agricultural Development Policies in Iran.« *World Development* (1981): 1097—1108.
- Aresvik, O. *The Agricultural Development of Iran*. New York: Praeger, 1976.
- Clark, C. and Haswell, M. *The Economics of Subsistence Agriculture*. New York: St. Martins, 1966.
- Daftary, F. »Development Planning in Iran: A Historical Survey.« *Iranian Studies* 6 (1973): 177—229.
- Duc, J. F. and Friedlander, *Government Finance*. Homewood: Irwin, 1977.
- Food and Agricultural Organization, »Agricultural Commodity Projections, 1970—80.« (Rome: FAO, 1976).
- G. Hänger, F. P. »Planning and Agricultural Policy in Iran — Program Effects and Indirect Effects.« *Economic Development and Cultural Change* 16 (1966): 107—117.
- George, P. S. and King, G. A. »Consumer Demand for Food Commodities with Projections for 1980.« Monograph. Berkeley, CA.: University of California, 1971.
- Hammed, K. A. and Benett, M. N. »Iran's Future Economy.« *Middle East Journal* 29 (1975): 418—32.
- International Labor Organization, »Employment and Income Policies for Iran.« (Geneva: ILO, 1973).
- LeBaron, A. »Long-Term Projections of Supply and Demand for Selected Agricultural Products in Iran.« Monograph. Logan, Utah: University of Utah, 1970.
- Mellor, J. W. *The Economics of Agricultural Development*. Ithica: Cornell University Press, 1966.
- Mellor, J. W. »Accelerated Growth in Agricultural Production and the Intersectoral Transfer of Resources.« *Economic Development and Cultural Change* 22 (1973): 1—16.
- Mellor, J. W. »Food Price Policy and Income Distribution in Low-Income Countries.« *Economic Development and Cultural Change* 27 (1977): 1—26.
- Moore, R.; Asayesh, A.; Montague, J. »Population and Family Planning in Iran.« *Middle East Journal* 28 (1974): 396—408.
- Walter, P. R. and Associates, »Agriculture and Agribusiness in Iran; Investment Opportunities.« Monograph. Tehran, Iran Financial and Commercial Service, 1975.
- Weinbaum, M. G. »Agricultural Policy and Development Politics.« *Middle East Journal* 31 (1977): 434—51.

ANALIZA I PROGNOZA TRAZNJE ZA HRANOM U IRANU

Mahmood YOUSEFI i Sohrab ABIZADEH

Rezime

Do 1977. godine poljoprivrednom sektoru iranske ekonomije nije poklanjano onoliko pažnje koliko industrijskom sektoru. Autori smatraju da je isticanje potrebe za samodovoljnošću u proizvodnji hrane — opravdano i sa ekonomskog i sa pragmatičnog stanovišta.

U članku je predložen jednostavan model tražnje. Na osnovu njega projicirane su stope rasta tražnje za hranom i odgovarajuće stope rasta ponude hrane u odabranim periodima. Pokazano je (orijentaciono) da, ukoliko samodovoljnost u proizvodnji hrane treba da se postigne za pet godina, stopa rasta ponude mora se povećati daleko iznad 3,2 procenta, koliko je iznosila (prosečno godišnje) u periodu 1973—1975. To, međutim, predstavlja neverovatnu prognozu, ako se ima u vidu postojeća neelastičnost poljoprivredne proizvodnje i postojeća politička neizvesnost. S druge strane, konvergencija ponude i tražnje može se ostvariti ako se vremenski period produži. Prema pretpostavkama modela, stopa rasta tražnje smanjiće se u jedanaestogodišnjem periodu. Vrlo je verovatno da će stopa rasta tražnje biti manja od stope projicirane modelom usled političkih i ekonomskih dislokacija u postrevolucionarnom dobu.

Takođe, verovatno je da će ekonomska dislokacija, poput obustave proizvodnje industrijskih postrojenja i posledične visoke stope nezaposlenosti nepovoljno uticati na agregatnu tražnju. U takvim okolnostima, ako se stopa rasta ponude hrane iz predrevolucionarnog doba inicijalno udvostruči, konvergencija ponude i tražnje predstavljaće verovatan događaj u dužem vremenskom periodu.

Treba posebno napomenuti da su prethodni zaključci uslovljeni uspostavljanjem političke stabilnosti i pretpostavki koje pogoduju jačanju svojinskih prava. Dalje, s obzirom da su podaci iz predrevolucionarnog doba poslužili kao baza za projekcije, rezultati ovog istraživanja nisu konačni. Kada novi i raščlanjeniji podaci budu dostupni, rezultati će biti preispitani.

THE DEMOCRATIZATION OF WORK IN AUSTRALIA*

G. W. FORD**

INTRODUCTION

This paper addresses itself to a set of issues which are as ancient as the organized division of labour, and which no doubt will continue to absorb the time and energies of those who are concerned about the way in which the productive activities of society are carried out, and the way in which the rewards for such activity are distributed. We do not pretend, therefore, to be saying much that is entirely new, nor do we aspire to say the last word. We do hope, as a result of the opportunity we have had to meet with large numbers of Australians who share our interest and concern, to discuss, read and reflect, to be able to put the issues in a contemporary Australian context, to sharpen our focus upon them, and to present some useful thoughts about the way ahead.

A dozen or so years ago when industrial democracy first became a public policy issue in Australia, it was perceived as something rather modern and exotic, that the Scandinavians and some other Europeans had, and we did not, just as we were once deficient in motorways and supermarkets. We have found that over the past decade this perception has changed so that we are now more aware of the historical continuities in relation to participation and work. It seems to us in fact that there is a basic long term trend in the direction of greater democracy, as a result of measures enacted by governments, the initiatives of trade unions, and the actions of the more progressive employers, and that this trend is likely to continue, given the other social forces now present in this society. However, there always have been and are always likely to be, forces that will resist the further democratization of work. To be sustained therefore, this long term trend will need informed advocacy and leadership.

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Alan Davies (Centre for Continuing Education, ANU)

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