

Causes of Inflation in Nepal : An Econometric Analysis

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Introduction

Inflation in Nepal may be represented by the national urban consumer price index. But this index is available only since 1972-73, according to which the price indices are 100.0, 118.2, 138.0, 137.0, 140.7, 156.4, 161.8, 177.6, and 201.4 in the fiscal years 1972-73, 1973-74, 1974-75, 1975-76, 1976-77, 1977-78, 1978-79, 1979-80, and 1980-81 respectively. The data show that for the period of nine years, the general level of prices has been doubled or even more than that which clearly depicts the inflationary situation in the country. Similarly, according to the consumer price index for Kathmandu, the average rate of inflation for the period of sixteen years, from the fiscal year 1965-66 to 1980-81, is 7.79 percent.

Now, in order to see whether this rate of inflation is favourable to the economy or not, we must analyze the rate of increase in output or real income. But for this purpose, only the data for GDP are available and taking it at 1974-75 constant price, it has been assumed that it represents the real income of the country. For the period of sixteen years, the average rate of increase in GDP is only 2.39 percent. Comparing this growth rate with that of population which is nearly 2.7 percent, we find no increment in per-capita GDP. On the other hand, government expenditure is also increasing every year leading to increase in aggregate demand which, in turn, will naturally lead to the increase in price level unless output increases correspondingly. But we have already seen that the output level is increasing only by a small amount and thus, it can be argued that the increase in aggregate demand will mainly cause to occur inflation in the economy. Similarly, increase in money supply leads to the increase in money income of the people and output remaining the same, it will raise the price level. Moreover, due to the open border with India, the movement of Indian

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prices will have a significant impact upon the domestic prices.

Though inflation has become one of the burning problems of the country, the failure of government in stabilizing the price level is clear to everyone. It is so because of the wrong policies adopted by the government due to the lack of knowledge about the exact determinants of inflation. Hence the present study attempts to analyze the main determinants of inflation so as to prescribe the suitable policies in order to cure it.

Objectives of the Study

1. To test how much money matters in explaining and stabilizing the movements in the price level in Nepal;
2. To test whether Indian inflation is the root cause of Nepalese inflation or not; and
3. To test the effects of GDP, government expenditure and net foreign exchange reserves upon the domestic price level.

Assumptions

- (a) The weighted consumer price index for Kathmandu represents the inflationary trend in the whole country.
- (b) GDP represents the GNP (Gross National Product) of Nepal. Also, GDP at 1974-75 constant price represents the real income or output of the country; and
- (c) The assumptions of Ordinary Least Squares Method are accepted while estimating the regression equations.

Review of Literature

Shrivastav and Saxena (9) in their study, have attempted to analyze the causal relationship between money supply, output and prices during the course of planning in India. They have estimated the following regression equation of prices on money supply:

$$X_3 = 64.3434 + 0.2938 X_1$$

where X_3 is the percentage change in wholesale prices and X_1 is the percentage change in money supply. Similarly, the regression equation of prices on money supply and output is:

$$X_3 = 85.2130 + 0.5066 X_1 - 0.3753 X_2$$

where X_2 is the percentage change in output.

With the help of empirical analysis, they have given the following conclusions:

- a. Rise in money supply causes the rise in prices
- b. Money supply has a larger impact on prices relative to output.
- c. In a developing economy, prices are influenced by various factors and money supply is one among them.

R.C. Vogel (11) in his study, has tried to analyze the determinants of inflation. He has taken the dependent variable as the percentage change in inflation, P'_t , and in one of his models the independent variables are the percentage changes in money supply during current and previous years, M'_t , M'_{t-1} and percentage change in real income during

current period Y'_t and the past changes in rate of inflation ($P'_{t-1} - P'_{t-2}$). One of the models estimated by him is:

$$P'_t = -0.31 + 0.586 M'_t + 0.407 M'_{t-1} - 0.298 Y'_t + 0.014 (P'_{t-1} - P'_{t-2})$$

(17.0)** (11.1)** (3.1)** (0.4)

$$\bar{R}^2 = 0.82$$

(The figures in the parentheses are t-statistics)

** Significant at 1 percent level.

Vogel concludes that the co-efficients of M'_t and M'_{t-1} are highly significant indicating that an increase in the rate of growth of money supply causes a proportionate increase in the rate of inflation within two years. Similarly, the rate of inflation is found to be inversely influenced by the growth rate of real income. But it is not influenced significantly by the past changes in the rate of inflation.

H. D. Pant (7), in his study, has tried to identify the determinants of inflation in Nepal by emphasizing the monetary factors. With the help of empirical analysis, he has concluded that one year lagged broad money supply and three months lagged Indian wholesale prices are the most significant factors in explaining the domestic rate of inflation.

R. P. Upadhyaya (10), in his dissertation, has attempted to present a money multiplier model and to explore some facts about the determinants of price level in Nepal. He has taken the consumer price index as the dependent variable and narrow money supply, Indian wholesale prices, GDP, government expenditure, foreign exchange reserves and time trend variable as the explanatory variables. With the help of multiple regression analysis, he concludes that Indian prices are highly significant for increasing the domestic price level. Similarly, increase in government expenditure is also responsible for inflation. But the current money supply is found to be insignificant.

Specification of Variables and the Models used in the study

- (a) M_1 = Narrow Money Supply which is equal to currency and demand deposits held by public.
- (b) M_2 = Broad Money Supply which is equal to the narrow money supply plus time deposits.
- (c) GDP = Gross Domestic Product at 1974-75 constant price.
- (d) P = Consumer price index.
- (e) M_{1-1} = One year lagged value of narrow money supply
- (f) M_{1-2} = Two years lagged value of narrow money supply
- (g) M_{2-1} = One year lagged value of broad money supply
- (h) M_{2-2} = Two years lagged value of broad money supply

- (i) IWP = Indian wholesale price index
 (j) IWP₋₁ = Three months lagged Indian wholesale price index
 (k) ICP₋₁ = Three months lagged Indian consumer price index
 (l) GE = Actual government expenditure
 (m) Fer = Foreign exchange reserves
 (n) t_t = time trend.

The sign—(bar) indicates the rate of change from previous year and '(prime) indicates the percentage change from previous year.

Models used in the present study and corresponding hypotheses are :

SHRIVASTAV AND SAXENA MODEL

$$P' = a_1 + b_1 M'_1 \quad \dots (1)$$

This model assumes that the percentage change in price level is directly influenced by the percentage change in narrow money supply.

$$P' = a_2 + b_2 M'_1 + C_2 GDP' \quad \dots (2)$$

This model assumes that the percentage change in price level is directly influenced by the percentage change in narrow money supply but inversely by the percentage change in real income.

R. VOGEL MODEL

$$P' = a + bM'_1 + cM'_{-1} + d GDP' + e (P'_{-1} - P'_{-2})$$

This model assumes that the percentage change in price level is an inverse function of real income but direct function of the current and one year lagged narrow money supply and difference between the percentage changes in one year and two years lagged rates of inflation.

H. D. PANT MODEL

$$\bar{P} = a_1 + b_1 \bar{M}_1 + c_1 \bar{M}_{-1} \quad \dots (1)$$

This model assumes that the rate of inflation is the direct function of the rates of changes in current and one year lagged narrow money.

$$\bar{P} = a_2 + b_2 \bar{M}_1 + c_2 \bar{M}_{-1} + d_2 \bar{M}_{-2} \quad \dots (2)$$

This model has included an additional variable, two years lagged narrow money, which is supposed to influence directly the rate of inflation.

$$\bar{P} = a_3 + b_3 \bar{M}_2 \quad \dots (3)$$

According to this model, current rate of inflation is assumed to be directly influenced by the current broad money supply.

$$\bar{P} = a_4 + b_4 \bar{M} + c_4 \bar{M}_{-1} \quad \dots (4)$$

This model has included an additional variable, one year lagged broad money and the sign of its coefficient is expected to be positive.

$$\bar{P} = a_5 + b_5 \bar{M}_2 + c_5 \bar{M}_2_{-1} + d_5 \bar{M}_2_{-2} \dots (5)$$

Again, an additional variable, that is, two years lagged broad money is included in this model which is also assumed to influence directly the rate of inflation.

$$\bar{P} = a_6 + b_6 \bar{IWP}_{-1} \dots (6)$$

According to this model, rate of inflation is the direct function of three months lagged Indian wholesale prices.

$$\bar{P} = a_7 + b_7 \bar{ICP}_{-1} \dots (7)$$

The model assumes that the rate of inflation is the direct function of three months lagged Indian consumer price.

R. P. UPADHYAYA MODEL

(In his model, all the data are converted into the form of natural logs).

$$\ln P = a_1 + b_1 \ln IWP + c_1 \ln M_1 + d_1 \ln GE \dots (1)$$

This model assumes that the rate of inflation is the direct function of Indian wholesale price, narrow money and government expenditure.

$$\ln P = a_2 + b_2 \ln IWP + c_2 \ln M_1 + d_2 \ln Fer \dots (2)$$

Dropping the variable government expenditure, this model has included a new variable, foreign exchange reserves, which is also supposed to influence directly the rate of inflation.

$$\ln P = a_3 + b_3 \ln IWP + c_3 \ln M_1 + d_3 \ln GDP \dots (3)$$

Similarly, dropping the variable foreign exchange reserves, GDP has been included in this model which is also supposed to influence directly the rate of inflation.

$$\ln P = a_4 + b_4 \ln IWP + c_4 \ln M_1 + d_4 \ln GDP + e_4 \ln GE \dots (4)$$

This model assumes that the rate of inflation is significantly and directly influenced by the Indian wholesale prices, narrow money supply, GDP and government expenditure.

$$\ln P = a_5 + b_5 \ln IWP + c_5 \ln M_1 + d_5 \ln GDP + e_5 \ln Fer \dots (5)$$

Dropping the variable government expenditure, this model has included the variable foreign exchange reserves.

$$\ln P = a_6 + b_6 \ln IWP + c_6 \ln M_1 + d_6 \ln t_t \dots (6)$$

This model has included a new variable time trend, which is also supposed to influence directly the rate of inflation.

$$\ln P = a_7 + b_7 \ln IWP + c_7 \ln M_1 + d_7 \ln t_t + e_7 \ln GDP \dots (7)$$

In this model, Indian wholesale prices, narrow money supply, time trend and GDP are included as the explanatory variable.

The present study is based on the secondary time series data (on annual basis) published in various documents. The data for consumer price index, money supply, foreign

exchange reserves, are taken from the various issues of *Quarterly Economic Bulletin* published by the Nepal Rastra Bank (NRB). GDP at 1974-75 constant price are also made available by NRB. The government expenditure data are collected from various *Annual Budget speeches of HMG, Ministry of Finance*. The Indian prices are taken from data published in *International Financial Statistics*. Data for the rate of inflation are converted into 1972-73 base year prices.

The present study covers the period of sixteen years, from 1965-66 to 1980-81.

Empirical Results and Their Interpretations

SHRIVASTAV AND SAXENA MODEL

(a) Estimating their first model, the following result has been obtained:

$$P' = 7.4089 + 0.0285 M'_{-1}$$

(0.1283)

$$R^2 = 0.1142 \quad F = 0.160$$

We see that this model does not fit in case of our country because R^2 is quite low and the t-value and F-value are insignificant. Thus, it can be argued that the increase in money supply does not have any significant influence on the increase in price level during the current period.

(b) Estimating another model of Shrivastav and Saxena, we have obtained the following result :

$$P' = 7.3531 - 0.0764M'_{-1} + 0.6071 \text{ GDP}'$$

(0.3057) (0.9386)

$$R^2 = 6.457 \quad F = 0.4487 \quad DW = 1.3873$$

We find that this model also does not fit because of very low R^2 and highly insignificant t and F values. The coefficient on M'_{-1} has appeared with a negative sign. Thus, it seems that increase in price level is not influenced significantly by the increase in narrow money supply and real income. In above model, the value of DW lies in inconclusive region.

R. VOGEL MODEL

Estimating the model used by Vogel, we have obtained the following results:

$$P' = 0.321 - 0.01 M'_{-1} + 0.485M'_{-1,-1} + 0.322 \text{ GDP}' + 0.261 (P'_{-1} - P'_{-2})$$

(0.06) (3.1)* (0.62) (1.51)**

$$R^2 = 59.1434 \quad F = 3.9809** \quad DW = 1.5429$$

We see that the current money supply and real income are insignificant in explaining the rate of inflation. Again, the coefficient on M'_{-1} has a negative sign and that on real income has a positive sign which is opposite to our hypothesis. But the co-efficient on one year lagged narrow money is significant at 1 percent level and that on the past changes

in rate of inflation, at 10 percent level. Thus, it can be argued that the rate of change in one year lagged narrow money and past changes in the rate of inflation are significant in explaining the current rate of inflation. In this model also, for autocorrelation, the test is inconclusive.

H. D. PANT MODEL

$$\bar{P} = -0.002 + 0.047\bar{M}_1 + 0.525\bar{M}_{1-1} \quad \dots (1)$$

(0.26) (3.16)**

$$R^2 = 43.5954 \quad F = 5.0239^{**} \quad DW = 1.1452$$

As in the previous model, the above results also show that the rate of change in one year lagged narrow money significantly influences the current price level. The current money supply is insignificant as before. Though the F-value is significant at 5 percent level, R^2 is low. For autocorrelation, the test is inconclusive.

$$\bar{P} = -0.003 + 0.047\bar{M}_1 + 0.524\bar{M}_{1-1} + 0.008\bar{M}_{1-2} \quad \dots (2)$$

(0.25) (2.99)* (0.04)

$$R^2 = 43.6058 \quad F = 3.0929 \quad DW = 1.1333$$

The results show that the two years lagged narrow money supply is insignificant. Hence it may be argued that people are not aware of the increase in money supply during current period so that they would increase their aggregate demand. Thus, there is money illusion at work in the economy. In this way, current money supply has no significant impact upon the price level due to the existence of money illusion in the economy. Further, because of the insignificance of M'_{1-2} it can be stated that there is no significant distributed lag nature of the money supply.

$$\bar{P} = 0.094 - 0.09\bar{M}_2 \quad \dots (3)$$

(0.32)

$$R^2 = 0.6896 \quad F = 0.0972$$

We find that the current broad money has no role to influence the price level.

$$\bar{P} = -0.004 - 0.176\bar{M}_2 + 0.639\bar{M}_{2-1} \quad \dots (4)$$

(0.68) (2.49)*

$$R^2 = 32.8974 \quad F = 3.1867 \quad DW = 1.2487$$

The results show that as in the case of narrow money, one year lagged broad money is highly significant. For autocorrelation, the test is unspecified.

$$\bar{P} = -0.019 - 0.148\bar{M}_2 + 0.616\bar{M}_{2-1} + 0.077\bar{M}_{2-2} \quad \dots (5)$$

(0.53) (2.25)** (0.34)

$$R^2 = 33.5560 \quad F = 2.0201 \quad DW = 1.1714$$

In this model also, as in the case of narrow money, the rate of change in one year lagged broad money is significant, but its current and two years lagged values are insignificant. For autocorrelation, the test is inconclusive.

$$\bar{P} = 0.0427 + 0.3353 \bar{IWP}_{-1} \quad \dots (6)$$

(1.7002)***

$$R^2 = 17.1130 \quad F = 2.8905$$

The results show that, to some extent, the three months Indian wholesale prices significantly influences the rate of inflation. But this model is not well fitted.

$$\bar{P} = 0.0485 + 0.3077 \bar{ICP}_{-1} \quad \dots (7)$$

(1.4298)***

$$R^2 = 12.7407 \quad F = 2.0441$$

As per this model, the three months lagged Indian consumer price also influences the rate of inflation. But this model too is not fitted well.

R. P. UPADHYAYA MODEL

$$\ln P = 1.2470 + 0.2008 \ln IWP - 0.0138 \ln M_1 + 0.3700 \ln GE \quad \dots (1)$$

(2.9393)* (0.6434) (3.5079)*

$$R^2 = 99.0855 \quad F = 433.4036* \quad DW = 1.0152$$

Very high explanatory power of the above model indicates the very good fit. The coefficients on IWP and GE are significant at 1 percent level. Thus, it is imperative that the current rate of inflation in India, significantly and directly influences the domestic inflation through the imports of various commodities. Similarly, when government expenditure increases, aggregate demand will increase which will raise the price level. We find that the current money supply is not only insignificant but also appeared to be negative which further supports our previous argument that current money supply has no role to influence the rate of inflation.

$$\ln P = 0.5981 + 0.1577 \ln IWP + 0.5502 \ln M_1 - 0.0739 \ln Fer \quad \dots (2)$$

(2.6871)* (1.6091)* (1.3296)

$$R^2 = 98.3832 \quad F = 243.4056* \quad DW = 0.9503$$

In the above model, the coefficient on M_1 is also significant at 10 percent level. But the coefficient on foreign exchange reserves is insignificant and appeared to be negative which is opposite to our hypothesis. The test for autocorrelation is inconclusive.

$$\ln P = -12.1039 + 0.2230 \ln IWP + 0.1866 \ln M_1 + 1.4912 \ln GDP \quad \dots (3)$$

(2.5761)* (1.1827) (1.9580)**

$$R^2 = 98.5923 \quad F = 280.1602* \quad DW = 1.7495$$

In this model, the coefficient on IWP is significant at 1 percent level, on GDP at 5 percent level and that on M_2 is insignificant. Thus, the level of output also influences signifi-

cantly the rate of inflation. The value of CW implies that there is no autocorrelation.

$$\ln P = -2.051 + 0.209 \ln IWP - 0.032 \ln M_1 + 0.38 \ln GDP + 0.327 \ln GE \quad (4)$$

(2.84)* (0.2) (0.46) (2.36)*

$$R^2 = 99.0794 \quad F = 295.9740* \quad DW = 1.3851$$

But in the above model, GDP is found to be significant and the significance of the variables are not different from those obtained in the previous models. The value of DW lies in inconclusive region.

$$\ln P = -12.103 + 0.195 \ln IWP + 0.254 \ln M_1 + 1.506 \ln GDP - 0.072 \ln Fer \quad (5)$$

(2.3)** (1.58)*** (2.05)** (1.46)***

$$R^2 = 98.8355 \quad F = 233.3997* \quad DW = 1.6025$$

In this model, the coefficients on M_1 and Fer are significant at 10 percent level and those on IWP and GDP at 5 percent level. The test for autocorrelation is inconclusive.

$$\ln P = 0.2999 + 0.1946 \ln IWP + 0.5019 \ln M_1 - 0.0243 \ln t \quad (6)$$

(2.0201)** (6.8902)* (0.6168)

A new variable, time trend, is introduced in the above model. But it is found to be insignificant. Here, in contrast to the preceding models, M_1 is found to be highly significant. As before, the test for autocorrelation is inconclusive.

$$\ln P = -12.371 + 0.23 \ln IWP + 0.204 \ln M_1 + 0.021 \ln t + 1.506 \ln GDP \quad (7)$$

(2.58)** (1.2) (0.57) (1.9)**

$$R^2 = 98.6512, \quad F = 201.1345*, \quad DW = 1.6884$$

Here, IWP and GDP are found to be significant at 5 percent level. But M_1 and time trend variable are insignificant. R^2 is very high and the F-value is also significant at 1 percent level which indicates that the overall significance of the regression is very good. For autocorrelation, the test is inconclusive.

Summary

1. The rate of increase in money supply (narrow as well as broad) does not have any significant influence upon the rate of inflation during the current period. But the rates of increase in one year lagged narrow as well as broad money have a significant impact upon the current rate of inflation. Thus, it can be said that people do not realize immediately the increase in money supply and as a result, money illusion is at work in the economy. But the rate of increase in two years lagged money supply has no significant influence upon the domestic price level.
2. The rate of increase in real income has no role to influence the rate of increase in price level.
3. To some extent, the past changes in the rate of inflation also influences the current rate.
4. The current Indian wholesale price is the most significant factor for the domestic rate

of inflation. Thus, increase in price level in India will immediately raise the domestic price level.

5. Increase in government expenditure will raise the aggregate demand in the economy, which, unless accompanied correspondingly by the increase in output level, will raise the price level.
6. In log-linear model, it has been found that the increase in level of output also influences significantly the rate of inflation.
7. The increase in foreign exchange reserves is not so much significant in influencing the rate of inflation.

Recommendation

Growth rate of money supply should be parallel with the growth rate of output in the economy. We have seen that one year lagged money supply will have a significant and direct influence upon the price level. Similarly, we have also seen that the increase in government expenditure directly influences the increase in price level. When government expenditure increases, aggregate demand will increase. Thus, in order to meet the increase in aggregate demand, the level of output must be raised in the economy so that it will prevent the rise in price level. For this, monetary policy should be directed in such a way as to create the favourable situation in order to raise the level of output. Also, monetary policy should encourage the productive utilization of government expenditure in order to raise the output level so that it may not adversely influence the price level.

On the other hand, it has been found that the Indian inflation is the root cause of domestic inflation. For this, an important cause is that the rate of exchange between NC and IC is not flexible. Thus, the effect of Indian inflation is immediately and significantly reflected in the Nepalese price level. For this reason, the rate of exchange with IC should be highly flexible so that the effect of Indian inflation might be realized or reduced. For this purpose, the central bank should give up the power to control this exchange rate and it be determined by the demand for and supply of NC and IC in the market.

Selected References

1. Aghevli, B. B. and M. Khan (1978): "Government Deficits and Inflationary Process, in Developing Countries" *IMF Staff Papers*, Vol. XXV, No. 3, Sept. pp. 383-416.
2. Chaipravat, Olarn *et al.* (1978): "Main Sources of Inflation in Developing ESCAP Countries", *Economic Bulletin for Asia and the Pacific*, Vol. XXIX, No. 1, June, pp. 51-75.
3. Griffiths, Brian (1976): *Inflation: The Price of Prosperity* (London: Weidenfeld and Nicolson).
4. Liadler, D. and M. Parkin (1975): "Inflation: A survey", *Economic Journal*, Vol. 85, No. 340, Dec. pp. 741-809.
5. Lioi, V. C. (1974): *Inflation in Developing Countries: An Econometric Study of Chilean Inflation*, (Oxford, North-Holland Publishing Co).

6. Otani, Ichiro (1975) : " Inflation in an Open Economy : A Case Study of the Philippines " , *IMF Staff Papers*, Vol. XXII, No. 3, Nov. pp. 750-74.
7. Pant, H. D. (1977): "Inflation in Nepal: A Macro Study," in B. Dhungana and N. Kayastha (Eds.), *Studies on Prices in Nepal* (Kathmandu: CEDA) pp. 11-23.
8. Pant, H. M. (1977): The Relationship Between Money Supply and Price Level in Nepal: An Econometric Study", M. A. Thesis, T. U.
9. Shrivastav, S. C. and P. C. Saxena, (1968): "The Relationship of Money Supply, Output and Prices in a Developing Economy: The Indian Case", *The Indian Economic Journal*, Vol. XVI, No. 2, Oct-Dec. pp. 249-55.
10. Upadhyaya, R. P. (1978): "Money Multiplier Model in Nepal (An Econometric Study)", M. A. Thesis, T. U.
11. Vogel, R. O. (1974): "The Dynamics of Inflation in Latin America: 1959-69", *American Economic Review*, Vol. LXIV, No. 1, Mar. pp. 102-114.

Book Review

G. Thimmaiah and Abdul Aziz, *Political Economy of Land Reforms*, Ashish Publishing House, New Delhi, pp.xiii + 94, Price Rs. 65.00

In the past decades many developing countries of the world introduced land reform programmes as a perennial source to change the socio-economic structure of the lower strata. But the objectives set in land reforms remained unfulfilled causing a great deal of frustration towards economic development in the low-income countries.

The present book, by Dr. Thimmaiah and Dr. Aziz, is an excellent exposition of the same story of land reforms in India. The explanations offered for the failure of land reforms in India have been an allegation to vested politicians, corrupt bureaucracy and economic and political dominance of landed interests. This may be true in many respects but who put forward these arguments failed to develop proper insights into the operational mechanics of the forces which frustrated the efforts of the government in effectively implementing land reform measures.

The book *Political Economy of Land Reforms* not only considers the results of land reforms in Karnataka state of India but also suggests to study such events on the basis of some logical conceptual frame work. The writers have rightly pointed out the truth that government, bureaucracy, landed interests, tenants and landless labourers have played their 'self-interest' roles through caste and class 'alignments' to frustrate formulation and implementation of radical reforms.

The book is divided into seven chapters. While chapter I is an introduction to the book, chapter II consists of theoretical framework upon which the analysis of the failure of land reforms in Karnataka is derived from the economic theory of human behaviour. Chapter III deals with the socio-economic setting and resulting master bottlenecks in which decision making on land reform measures is carried on. Chapter IV consists of a historical sketch of the land system and land regulation of the pre-independence years wherein an attempt has also been made to give a preview of the evolution of land system in Karnataka justifying how the attempts at land regulation has touched only a fringe of the problem. The succeeding chapters V, VI, and VII unfold the drama of caste and class group behaviour in relation to state government's regulation regarding land tenures and fixation of ceilings; the forces working against land reform measures are also identified. The last chapter (VIII) is concentrated on policy implications.

In their book the writers have argued that the economic theory of human behaviour is based on the philosophy of 'interest' which motivates to maximise their own welfare. In maximising the welfare of self interest groups (like landlords, tenants, bureaucrats) collide each other forming alliance and rival groups on the basis of caste and class lines.

The writers have strong feeling that it is ultimately the caste groups and their interest that are going to shape the policies and programmes and their implementation. As a result, in India "the three-and-a half decades of experience with the formulation of land reforms policies and the manner in which these policies has been implemented show that the intended objective of land reforms, namely giving land to the actual tiller, eliminating absentee land-lords, tenancy system and the economic exploitation of the agricultural labourers have remained" on paper. This has been more or less true in the case of many developing countries of the world.

The writers have made a special effort to draw a vivid picture of Karnataka's economic and social set-up. While doing so they have explicitly mentioned the reality how Karnataka's economy is comparatively backward to that of national economy, in spite of having most diversified cropping pattern and many mineral resoures. They further highlighted the issues how series of land reform mersures especially land ceiling proposals were made sterile due to the caste and class alignments.

The book *Political Economy of Land Reforms* is not only a critical account of the land reforms legislation in India but also a significant document that contains the fact that no one single caste or class should be allowed to dominate political and administrative power in any economy.

Although this book is written in the context of Inida, the policies recommended by Prof. Thimmaiah and Prof. Aziz are equally pragmatic and applicable to other developing countries. Therefore, the book is highly useful to the policy makers, academics and researchers working in the field of land reforms. Hardly there is any printing mistake and the get up is attractive. Finally, a question: what problem would have been if the publisher had given the date of publication ?

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