African Alternative Framework to Structural Adjustment Programmes for Socio-Economic Recovery and Transformation

Selected Policy Instruments
African Alternative Framework
to Structural Adjustment Programmes for
Socio-Economic Recovery and Transformation

Selected Policy Instruments
# Table of Contents

Foreword .......................................................... iv

Part One: An Overview .............................................. 1

1 The Context ....................................................... 1

1.1 Origin and Background ......................................... 1

1.2 The Imperative of Appropriate Policy Instruments for Adjustment with Transformation ........................................... 3

1.3 The Regional/Subregional Dimensions ............................ 4

1.4 The regional and Sub-regional Dimensions ........................ 5

2 A Summary ..................................................... 6

2.1 Multiple Exchange Rate System .................................... 6

2.2 Differential Interest Rate Policy and Selective Credit Control ................................................................. 7

2.3 Price Support Policies for Food Self-Sufficiency in Africa ......................... 8

2.4 Implementation Strategies and Monitoring ............................ 8

Part Two: Selected Policy Instruments ................................. 11

3 Multiple Exchange Rate System (MERS) .......................... 11

3.1 Exchange Rate Policy in the Developmental Context ................. 11

3.2 The Basis for MERS ........................................... 12

3.3 Design and application of MERS .................................. 18

4 Differential Interest Rates Policy And Selective Credit Control (DIRP AND SCC) ............ 21

4.1 General Review of Interest Rates Policies and their Impact ............. 21

4.2 The Basis for DIRP and SCC ...................................... 26

4.3 Design and Application of DIRP and SCC .......................... 29

5 Price Support Policies For Food Self-sufficiency In Africa (PSP) .................... 36

5.1 Introduction .................................................. 36

5.2 Food Self-Sufficiency and Price Support Policies ..................... 37

5.3 Assessment of the Validity of Price Support Policies for Food Self-Sufficiency in the African Context ................................................................. 39

5.4 Design and Application of PSP for Food Self-Sufficiency ............... 43

Part Three: General Conclusions .................................... 49

6 Implementation Strategies And Monitoring ................................ 49

6.1 Introduction .................................................. 49

6.2 Complementarities and Trade-offs ................................ 49

6.3 Implementation .............................................. 50

6.4 Monitoring ................................................ 52

Annex .............................................................. 53
Since its adoption in April 1989 by the joint meeting of African Ministers of Planning and Ministers of Finance, and subsequently by the African Heads of State and Government in July 1989 at the summit meeting of the Organisation of African Unity, the African Alternative Framework to Structural Adjustment Programmes for Socio-Economic Recovery and Transformation (AAF-SAP), has been widely perceived as an instrument which has tremendous potential to contribute, to the effective economic adjustment and long-term development of Africa, especially after the lost decade of the 1980s. Little wonder that the Alternative has raised great expectations among African countries, in their relentless search for appropriate policies and measures that will enable them not only to adjust to the changing economic circumstances - domestic and external - but also and most importantly to transform their economies. Inevitably, AAF-SAP has generated some controversy, especially as it challenges conventional wisdom and in particular some major policy instruments commonly used in the context of existing Structural Adjustment Programmes. And of course, the challenge has been borne out by the sombre reality in many African countries.

There are, therefore, two strong reasons for the Economic Commission for Africa to intensify its efforts in the operationalization of AAF-SAP. First, it is essential that African policy makers be provided with the necessary theoretical and empirical background that will enable them to adequately formulate their respective programmes and select the appropriate policy instruments together with their modus operandi. A second reason for the ECA to continue its efforts towards the operationalization of AAF-SAP is the need to build a consensus between African countries and their major bilateral and multilateral development partners, including the Bretton Woods institutions. Indeed, since the adoption of AAF-SAP, extensive and intensive consultations have taken place and there is an emerging consensus around the inescapable fact that adjustment can only take place pari-passu with transformation. Indeed, both the 1989 World Bank long-term Perspective Study on Sub-Saharan Africa: From Crisis to Sustainable Growth and the report of the Conference on Africa organized in July 1990 in Maastricht (Netherlands), by the Dutch Government and the World Bank recognize this fact categorically and emphatically.

The present study stems from both ECA's responsibility to assist African countries in the implementation of AAF-SAP and the recognition of the imperative need for consensus building around the major premises on which AAF-SAP stands its ground. It should also be recalled that, in order to have an overall assessment of the impact of some policy instruments, African Ministers of Finance specifically requested for in-depth studies of some major policy instruments that have ramification for the entire economy and tremendous impact on the pace and direction of the transformation process. The present study has covered three of these. They are:

(i) Multiple Exchange Rate System (MERS);
(ii) Differential Interest Rates Policies and Selective Credit Control (DIRP-SCC); and,
(iii) Price Support Policies for Food Self-Sufficiency (PSP).

In view of their special implications on social progress, economic growth and structural transformation, these policy instruments are the main focus of the present study. Indeed they have a direct influence on all spheres of economic activity including, in particular, the level and structure of production, export performance, magnitude and pattern of imports, consumption levels and patterns, external debt, balance of payments and resource flows. Hence, the application of these policy instruments does determine, to a large extent, the path and content of both adjustment and transformation.

It should be emphasized that in addition to defining the various forms that the three policy instruments may take, depending on the context in which they are applied, the study also highlights their respective advantages and limitations based, in most cases, on empirical evidence, as well as their design and application mechanisms. Overall, the study shows that, when designed, applied and managed appropriately, the advantages of the three policy instruments far outweigh their possible limitations.
Two major issues are also addressed in the study: namely, the complementarity of the three policy instruments and their time dimension. No doubt, as emphasized in AAF-SAP, policy-instruments should be selected, designed and applied as an integrated package so as to maximize their synergetic effects. Also, while they may be considered as temporary measures that need to be continuously reviewed, they should remain in place until the basic objectives of transformation are achieved.

I wish publicly to acknowledge that the study has greatly benefited from comments and suggestions made on an earlier draft which was circulated to some officials in governments and development institutions, including the IMF and the World Bank, and to University researchers. While not all suggestions have been or could be incorporated in the final version, most comments and criticisms have helped in clarifying many issues. The ECA is therefore grateful to all those concerned, and particularly to the President of the World Bank and the Managing Director of the International Monetary Fund who made it possible for their respective departments to provide substantive comments on the various policy instruments. No doubt, such co-operation between the Commission and the Bretton Woods institutions augurs well for the future as it will contribute to ongoing efforts to arrive at global consensus on all major policy issues for enabling Africa to meet the challenges of the 1990s.

Adebayo Adedeji
United Nations Under Secretary-General
and
Executive Secretary of the Economic Commission for Africa
PART ONE:
An Overview

1. The Context

1.1 Origin and Background

1. Since the beginning of the 1980s, African countries have been experiencing a serious crisis as evidenced by the persistent retrogression in almost every major indicator of economic and social activity. In addition to that, the continent’s socio-economic crisis has also been characterized by a marked disintegration of the productive sector and the physical and social infrastructure which eroded the standards of living and the very basis for production and productivity.

2. After a series of intense debates on the factors behind Africa’s economic decline, an international consensus among the donors and multilateral financial and development institutions has converged with the long-held African viewpoint that the crisis is fundamentally structural and long-term in nature. As far back as the late 1970s, African policymakers had come to this conclusion and, in a restatement in 1986, Africa’s Submission to the Special Session of the United Nations General Assembly graphically captured the essence of the crisis in the following expression:

   a vicious interaction between excruciating poverty and abysmally low levels of productivity in an environment characterized by serious deficiencies in basic and social infrastructure, most especially the physical capital, research capabilities, technological know-how and resources development that are indispensable to an integrated and dynamic economy (P.4)

3. Certainly, a host of exogenous and internal factors has also aggravated the crisis. Among the exogenous factors are the collapse of primary commodity markets, deteriorating terms of trade, reduced capital inflows and a high external debt and debt-servicing burden. The internal factors include ineffective economic management and use of resources, recurrent drought and armed conflicts. The crisis manifested itself, inter-alia, in inflationary pressures and balance of payments and budget deficits. These, however, are mostly the direct result of the lack of structural transformation, the rather unfavourable physical and socio-political environment in the African countries, and their excessive outward orientation and structural dependence.

4. This view has been supported by the Issues Paper to the Maastricht Conference on Africa on the emerging synthesis on the nature of the African crisis and how to deal with it. According to the paper,

   The development of Africa is a long-term transformation process that should not be subordinated to short- and medium-term reform requirements. It requires sustained efforts over a long period of time to lift output and human needs satisfaction to permanently higher levels. It must be an endogenous process, responsive to national aspirations, carried out under national leadership, following the priorities set out in a national long-term perspective strategy.

   Major macro-economic imbalances, such as those that occurred in the 1980s disrupt development programs and must, therefore, be corrected. However, there is widespread agreement that programs to correct such imbalances should be designed in a way that does not jeopardize the transformation process, upset its priorities or undermine the foundations for future progress.” (P.4)

5. Thus to tackle the African crisis, development strategies and programmes must simultaneously deal with the short- to medium-term problems as well as the fundamental problems and underlying root causes of the crisis. Since the African crisis is not purely an economic but also a human and political crisis, dealing with its root causes must go beyond the economic aspects to encompass the human and political dimensions. Fundamental and broad changes will need to be made to ensure that the human dimension is made central to the development process. This requires that the main focus of development
policies should be the achievement of sustained improvements in living standards and the elimination of mass poverty; the economic empowerment of the people; democratization of the development process through popular participation and public accountability; and, the creation of an enabling environment that promotes initiative and enterprise and guarantees economic justice. It is only through widespread and pervasive economic and political empowerment, the creation of an enabling environment and the guaranteeing of economic and political justice and public accountability that the endogenous development and transformation process can become sustained and sustainable.

6. The fact that the African socio economic crisis has manifested itself in serious internal and external economic imbalances together with the resultant dire need for external resources has per force led over 30 African countries to adopt stabilization and structural adjustment programmes (SAPs) with the support of the World Bank and IMF. This trend has been further reinforced by the insistence of the donors that Africa must adopt such programmes as a condition for obtaining bilateral support and even debt relief. Indeed, as emphasized in AAF-SAP, autonomous resource flows (i.e. resources not tied to specific programmes) are being reduced, leaving most African countries in need of external resources with no other option than to embark on orthodox Structural Adjustment Programmes.

7. However, empirical evidence has clearly shown that the sustained economic growth expected from those programmes has not materialized. The rate of investment rather than improve has tended to fall, budgetary and balance-of-payments deficits have tended to widen and the debt and debt-service burdens have become unbearable. The social impact of SAPs has even raised greater concern not only at the level of African governments, but also in international fora such as the forty-third session of the UN General Assembly during the mid-term review of United Nations Programme of Action for Africa’s Economic Recovery and Development (UN-PAAERD) and the International Conference on the Human Dimension of Africa’s Economic Recovery and Development. United Nations agencies such as UNICEF, UNDP and ECA and parliamentary and Congressional studies as well as findings by independent institutions and experts have expressed similar concerns about the failure of SAPs in poverty alleviation and their aggravation of the social crisis.

8. It has become increasingly evident that sustained development and transformation cannot be achieved without addressing the fundamental structural bottlenecks of the African economies. Indeed, during the mid-term review of UN-PAAERD, the UN General Assembly urged that:

African countries should increase their efforts in the search for a viable conceptual and practical framework for economic structural adjustment programmes in keeping with the long-term development objectives and strategies at the national, sub-regional and regional levels. (General Assembly, A/RES/43;27 January 1989, P.17)

9. As it may also be recalled, these developments especially the encouragement by this call of the UN General Assembly, led the ECA to embark, in early 1988, on the search for an African alternative framework to SAPs that would simultaneously address both the adjustment and structural transformation problems of the African economies. Partly in response to this call, the ECA came out with the African Alternative Framework to Structural Adjustment Programme for Socio-Economic Recovery and Transformation (AAF-SAP) in April 1989. This alternative, was subsequently endorsed by the Summit of the OAU Heads of State and Government, the Summit of Heads of State and Government of the Non-aligned countries and the forty-fourth session of the UN General Assembly.

10. It is significant that soon after the adoption of AAF-SAP the World Bank came out with a publication entitled Sub-Saharan Africa: From Crisis to Sustainable Growth, A Long-term Perspective Study (LTPS) which expressed doubts as to the relevance of ongoing SAPs in addressing Africa’s crisis - as indeed the ECA, UNICEF and other organizations have been pointing out for years in the following words:

Does Africa face special structural problems that have not been properly understood? Has the institutional dimension been neglected? Have the recent reform programs been too narrow or too shallow? Could the process of formulating and implementing reforms be improved? Has the effect of external factors been correctly assessed? Are external assistance and debt relief appropriate and adequate? More fundamentally, is there a long-term vision that is both credible and energizing? (P.1)
11. The Bank itself provided a generalized answer to these questions by stating the following in the foreword to the publication:

* A central theme of the report is that although sound macroeconomic policies and an efficient infrastructure are essential to provide an enabling environment for the productive use of resources, they alone are not sufficient to transform the structure of African economies. At the same time major efforts are needed to build African capacities - to produce a better trained, more healthy population and to greatly strengthen the institutional framework within which development can take place. This is why the report strongly supports the call for a human-centered development strategy made by the ECA and UNICEF. (P. xii).*

12. If, as everyone now agrees, conventional SAPs are inadequate in addressing the real causes of the economic, financial, human and social problems facing African countries which are of a structural nature, then it is imperative that an alternative to SAPs, that encompasses both adjustment and transformation, should be pursued immediately.

1.2 The Imperative of Appropriate Policy Instruments for Adjustment with Transformation

13. AAF-SAP is based on the premise that adjustment and transformation must be conceived and implemented as inextricably linked and intertwined processes such that progress will be made simultaneously on the two fronts. While the norms of adjustment with transformation will certainly depend on specific national characteristics and prevailing national conditions, these norms have to be consistent with the overall long-term development objectives underlying the process of transformation that African countries must pursue, namely: alleviating poverty and improving the welfare of the people through a human-centred development process; establishing a self-sustaining process of economic growth and development; and, vigorously pursuing national and regional collective self-reliance through the integration of African economies. The structures to adjust or transform would also have to include the real and material structures and relations of production, distribution, consumption and technology; the socio-economic institutional structures; the domestic financial structures; and, the international trade and financial structures.

14. To attain these development objectives and eliminate the structural bottlenecks of the African economies, AAF-SAP elaborated a number of major policy directions.

These are:-

I. Generation of Factor Product
   (a) Enhanced production and efficient resource use,
   (b) Greater and more efficient domestic resource mobilization,
   (c) Improving human resources capacity,
   (d) Strengthening the scientific and technological base,
   (e) Achieving vertical and horizontal diversification.

II. Pattern and Level of Factor Income Allocation
   (a) Establishing a pragmatic balance between the public and private sectors,
   (b) Creating an enabling environment for sustainable development,
   (c) Shifting resources from non-productive to highly productive activities and sectors,
   (d) Improving the pattern of income distribution among households and different socio-economic groups.

III. Pattern of Expenditure of Income for the Satisfaction of Critical Needs
   (a) Attaining food self-sufficiency,
   (b) Lessening import dependence,
(c) Re-aligning consumption patterns with production patterns,
(d) Managing debt and debt-servicing.

15. The adoption of the afore-mentioned policy directions and the objectives of adjustment with transformation stipulated in AAF-SAP would, in general, necessitate the use of a number of policy instruments and measures. These include, inter-alia, multiple exchange rates, differential interest rates, selective credit control and price support policies for regional food self-sufficiency in Africa.

16. It should be emphasized here that the particular package of policy instruments will vary from one country to another. Thus, there is need for flexibility in the choice, articulation, design and implementation of national packages of policy instruments and measures to take into account the particular circumstances in the individual African countries and how they are evolving over time. Likewise, policy packages may also differ from one period to another even in the same country, in respect of the appropriate mix of policy instruments and measures, i.e. with respect to complementarities and trade-offs.

17. At their meeting in Blantyre, Malawi, from 3 to 5 March 1989 during which they adopted AAF-SAP, the African Ministers of Finance indicated the need for an in depth review of some specific policy instruments and measures of AAF-SAP. Specifically, three of these policy instruments are analysed in this document; namely, multiple exchange rate system, differential interest rates and selective credit control policies; and, price support policies for regional food self-sufficiency. Although they are among the key instruments of AAF-SAP, they must not be treated in isolation from the totality of available policy instruments and measures and must be seen as an integral part of the policy package. The efficacy of using any of the three instruments in combination with other instruments in the package of policy instruments and measures to be implemented in any African country would ultimately depend on the particular circumstances of that country and the advantages to be gained from the combination of and trade-offs among policy instruments. The study also addresses the co-ordination, implementation and follow-up aspects of the operationalization of policy instruments.

1.3 The Developmental Context of AAF-SAP Policy Instruments

18. Although they are among the key instruments of AAF-SAP, they must not be treated in isolation from the totality of available policy instruments and measures and must be seen as an integral part of the policy package. The efficacy of using any of the three instruments in combination with other instruments in the package of policy instruments and measures to be implemented in any African country would ultimately depend on the particular circumstances of that country and the advantages to be gained from the combination of and trade-offs among policy instruments. The study also addresses the co-ordination, implementation and follow-up aspects of the operationalization of policy instruments.
adjust, say the rate of interest when the forces of supply and demand bring it to a level which is judged to be undesirable vis-a-vis certain economic policy objectives.

3. The very search in the short- to medium-term for equilibria, be that an equilibrium exchange rate or interest rate, is a questionable quest. The preoccupation with equilibrium is another questionable aspect of the "competitive model" and is also contrary to the very conceptual logic and realities of underdevelopment. Hence, the search for equilibrium as an overriding objective in underdeveloped economies before underdevelopment has been liquidated is a futile and illogical pursuit. It involves the sacrifice of more urgent and more basic development objectives in order to satisfy the requirements of stabilization and equilibrium. It is in view of this reality that the theory of the second-best correctly postulates that in circumstances where the full conditions for full equilibrium and maximum social welfare cannot be satisfied because of such issues as market imperfections and the existence of externalities, the system should settle for a second-best optimum. Thus, given the present state of underdevelopment of the African economies, the search should not be for equilibrium per se, but for the most efficient manner for managing disequilibria as efforts to achieve sustained growth, transformation and competitiveness over the long-run are being pursued.

20. Indeed, the use of the policy instruments of SAPs has demonstrated in practice the failure of those instruments to elicit a desirable response. Repeated generalized devaluation has, for example, failed to achieve balance of payment viability, ensure an efficient allocation of resources and eliminate parallel markets. If anything at all, it has tended to intensify encourage speculation. Likewise, high unified lending interest rates have tended to encourage speculative rather than productive activities and to quite significantly fuel inflation. They have hardly been able to influence the rural sector due to the weakness of financial structures. The overall effect on the volume and productivity of investment has also been less than adequate.

21. The use of the policy instruments of AAF-SAP - such as multiple exchange rates (MERS); differential interest rate policy (DIRP) and selective credit controls (SCC) and price support policies (PSPs) - can significantly contribute to achieving the objective of structural transformation. Having stated this, it is important to stress at the same time that to achieve this objective, these policy instruments must be carefully designed within the framework of AAF-SAP and must be made to operate efficiently and in a mutually reinforcing manner.

22. Of special importance is the need to contain and eliminate, both at the stages of design as well as application, any administrative problems which are likely to arise. Both in the design and application of policy instruments, corrupt practices and fraudulents transactions must be discouraged and application and monitoring must be facilitated by narrowing down selectivity (e.g. making multiple rates as simple as possible and minimizing the divergence between the allocation of resources based on the free market and the one based on development priorities); ensuring effective discipline and strengthening existing institutions. In this regard extra care must be taken to avoid the situations whereby too much power is concentrated in the hands of politicians and civil servants, thereby leading to fraudulent practices. Fiscal and monetary reform to streamline and simplify procedures and regulations must be undertaken. Administrative mechanisms must be made clear-cut with unambiguous goals and priorities. The avoidance of massive and frequent devaluation, high inflation and other destabilizing policies are also essential elements of the efficient design and application of the policy instruments. Needless to state that these policy instruments should be pursued until full structural transformation is achieved.

1.4 The Regional and Sub-regional Dimensions

23. Underlying philosophy of AAF-SAP is to ensure the rapid achievement of structural transformation both at the national and regional levels. This can be achieved only when policy packages within the AAF-SAP framework are elaborated and implemented by African countries in a co-operative manner. Such co-operation and co-ordination of efforts is particularly called for in the 1990s when regional economic co-operation and integration will be of paramount importance for the recovery and transformation of the African economy.
24. The experience in the 1980s clearly shows that where neighboring countries adopt widely different approaches to structural adjustment, the limitations imposed on individual member states in the use of particular policy instruments could be generally severe. In particular, the difficulties of policing national borders has meant that such policy instruments as exchange rate and price support for food production need to be closely coordinated in design and application. Indeed, this is an aspect of the wider issue of regional and sub-regional economic cooperation on which the continent has to be poised for more decisive action in the 1990s. In the meantime, the issue of coordinating adjustment programmes needs to be taken up seriously by sub-regional economic groupings, such as the Economic Community of West African States (ECOWAS), the Preferential Trade Area for Eastern and Southern African States (PTA), the Economic Community of Central African States (ECCAS) and the Arab Mahgreb Union (AMU), since greater coordination will go a long way to improve the effectiveness of national policies and economic transformation.

2. A Summary

25. In summary, the main thrust of this document is the rationalization of the need for careful use of multiple exchange rates; differential interest rates, and price support measures for food production with production subsidy as core policy instruments for the operationalization of AAF-SAP. The case for the use of the three policy instruments has been established in relation to Africa’s development environment, both domestic and external, and its associated physical, human and technological constraints, the removal of which has been central to the region’s development strategy. This is stipulated in the Lagos Plan of Action and the Final Act of Lagos, and should therefore constitute the main target of socio-economic policy in the 1990s. Indeed, if implemented within the holistic approach called for by AAF-SAP, these policy instruments could, through their impact on the price system and resource allocation, set in motion a viable and sustainable process of economic transformation and stability in the region. For this to be achieved, it is imperative that each of the three policy instruments should be formulated and applied in a timely and consistent manner that would ensure their mutual viability. Failure to do so may, contrary to intentions, compromise their effectiveness.

2.1 Multiple Exchange Rate Policy System

26. Exchange rate policy assumes special importance in policy design for the realization of growth and transformation in the African region. But this policy has to be applied in such a way as to take the region’s structural characteristics into consideration and be well targeted help promote development strategy and priorities. Conventional stabilization and structural adjustment programmes (SAPs) assign a central role to exchange rate adjustment in the pursuit of restoring internal and external disequilibria, which are attributed principally to the over-valuation of national currencies. Hence the advocacy of free markets for foreign exchange, currency auctions and devaluation. It is argued that only devaluation can eliminate currency over-valuation, enhance the competiveness of traded goods and help “switch” resources to import-competing and export industries, and thereby redress the payments position and ensure a rational market-determined allocation of resources. But experience in many African and Latin American countries which have implemented this policy indicates that rather than restoring the external balance, this policy has in fact resulted in further aggravation of the economic and social dislocations and the intensification of inflationary pressures. Devaluation has even failed to eliminate parallel markets because of the inelasticity of demand for foreign exchange in foreign-exchange-constrained economies and in a context of highly skewed income distribution and allied consumption patterns.

27. Especially, in Africa, generalized devaluation has failed to work according to the logic of neoclassical theory because it ignores the structural realities of the region, particularly those pertaining to the rigidities of its production, distribution and consumption structures. The long gestation lags which characterize Africa’s production structure, for example, negate the validity of the implicit assumption of a swift “switching” of resources and their conversion into productive capacity. On the contrary, the fast transmission of higher import costs arising from devaluation into the production cost structure eventually erodes competitiveness in general and particularly for export products. Targeting prices without giving
due cognizance to the regularity of supply of inputs also results in failure to take advantage of new opportunities even when productive capacity already exists. It is in the light of these and other pervasive impact of devaluation, which typically outweigh its alleged advantages in the African context, that AAF-SAP has advocated the use of multiple exchange rate system (MERS) in Africa.

28. The use of multiple exchange rate policy as an alternative rests on the rationale of price discrimination which is widely practised in many parts of the world in the pricing of goods and services. This price discrimination in foreign exchange allocation can ensure the rationing and channelling of scarce foreign exchange resources to priority areas.

29. MERS could thus be used in four basic contexts: structural transformation, balance of payments adjustment, protection of industry and taxation of international transactions. MERS can also be an effective instrument for the promotion of confidence in the national economy and encouraging the inflow of the remittances of nationals working abroad and for the control of capital flight. In this context, the common types of MERS are asymmetrical dual rates for goods and capital flows; uniform dual rates for capital flows and investment returns; different rates for the repatriation of investment and returns; exchange spread or margin between buying and selling rates; penalty exchange rate for some exports and imports; and, subsidy rate for some exports and imports.

30. In a developmental context, a major feature of MERS is its flexibility. It could be designed in a simple but responsive way which combines the advantages of both fixed and floating rates while minimizing their disadvantages. However, the design of MERS must be guided by a thorough understanding of the working and constraints of the economy concerned as well as by experience gained by countries which have applied it, particularly in Africa and Latin America. The Operationalization of MERS requires the clear articulation of its objectives and its situation within the AAP-5AP framework. Its implementation requires an efficient and honest bureaucracy as well as a transparent and accountable administration.

2.2 Differential Interest Rates Policy and Selective Credit Control

31. Interest rates in a developmental context are expected, to serve various policy objectives rather than be confined to equilibriating the supply and demand for funds. This is constrained by such widely observed phenomena in Africa as the narrowness, fragmentation and imperfections in the money and credit markets and the predominance of the subsistence sector. It is in the light of these constraints that AAF-SAP advocates the use of differential interest rates policy (DIRP) and selective credit control (SCC).

32. The focus of both policy instruments is the simultaneous increase of savings and the rationalized and economical use of financial resources to promote the development process through channelling credit to priority sectors and key industries. The lending institutions could be compensated for lending at low interest rates through the rediscount system and rationing credit to non-priority uses such as the speculative holding of inventories.

33. Other justifications for the adoption of DIRP as a policy instrument for development include economies of scale, promotion of infant industries and other social and political objectives such as meeting special needs like housing for low income groups. However, like MERS, DIRP must be specific to structural conditions and consequently serve the policy goals of the country concerned. Thus, they may vary from one country to the other, and from one period to the other, depending on the evolution of the economy and national goals.

34. The level and range of differential interest rates should be determined carefully, bearing in mind, in addition to the goals outlined above, the concomitant need to expand the volume of loanable funds and the avoidance of undermining and weakening financial intermediation. Thus, there is need to carefully weigh the advantages and disadvantages of differential interest rates against those of market-determined interest rates which, due to market imperfections, may open the way for manipulation by monopolistic and oligopolistic structures. This may result in very high nominal rates of interest which would have an aggravating effect on debt burden and inflation. However, there is also need to minimize the divergence between the allocation of resources based on the free market and administrative allocation based on development priorities.
35. It is essential to keep the weighted real interest rate positive in order to increase savings and the productivity of investment since development will depend on both the quantum and productivity of investment. In order to achieve this objective, it is essential to control inflation effectively rather than raise nominal interest rates excessively.

36. The design of DIRP and SCC should benefit from the lessons of experiences in developed and developing countries, while bearing in mind that the approach of each country must be guided by the structure of its financial market and institutions. Central Banks will have to play a more active role to achieve the desired redirection of credit and regulate the portfolio of financial institutions in accordance with development priorities.

37. DIRP and SCC should be implemented in such a way that the system is self-financing. In other words, banks should manage their lending portfolios in such a manner that the differentials among interest rates will still allow for normal profits for the banking system while, at the same time, the priority sectors are favoured. Differential interest rates could also be financed, among other ways, through special assistance to small entrepreneurs and farmers.

2.3 Price Support Policies for Food Self-Sufficiency in Africa

38. The case for the application of price support policies (PSP) has been established in relation to the achievement of the strategic objective of realizing adequate and secure food supply which is a pre-requisite for sustaining a high level of economic development in Africa. Such a strategy will not only allow Africa to attain higher levels of food self-sufficiency, especially in the staples which constitute the African diet, but relieve the region from political pressures and the escalating financial burden of food imports, and insulate it from the vagaries of international trade in food grains.

39. Although Africa is well endowed with the potential for achieving the goal of food self-sufficiency, per capita food supply and food self-sufficiency ratio, particularly for cereals, have been falling steadily since the late 1960s, moving Africa from a net food exporter in the early 1960s to a net food importer in the 1970s and 1980s. This arose from the low level of agricultural productivity due to low agricultural investment, poor technology and inadequate incentives to farmers.

40. There is therefore an urgent need to reverse these perverse trends in productivity. This requires, foremost, the enhancement of food production capabilities and the provision of the necessary incentives to overcome the price and income uncertainties of farmers by applying effective price support policies. Such policies could introduce a significant element of certainty in the farmers' perspectives and therefore increase their ability to plan their activities, induce the adoption of new production techniques and ensure a more efficient use of available resources. PSP can also go a long way in mitigating the sub-optimality in input application and/or the undervaluation of farmers' output arising from the widely observed imperfections in African food markets. Moreover, raising and stabilizing farmers' incomes can, in turn, bring about an increase in the level of effective demand in the economy, shift the priorities of traditional farmers to the modern sector and induce greater release of marketable surplus, thus making it easier to grapple with the social issues of education, health and nutrition.

41. The ultimate goal of PSP is to help achieve food self-sufficiency, satisfy basic welfare requirements and engender long-term transformation of the food subsector. Careful design and effective implementation and monitoring of the policy will thus be required at the level of individual countries.

42. The establishment of a buffer stock is an essential requirement in the successful implementation of PSP. Where countries already have buffer stocks or strategic reserves, the scheme will hardly involve initial capital outlays. Only in countries without existing buffer stocks will the introduction of PSP require some initial financing. The additional costs involved could however be minimized through careful design and the limitation of the coverage of the policy package. The scheme should be self-financing in its day-to-day operations, either through the use of an equilibrating market mechanism, or through the price differentials involved in the management of the buffer stocks.
2.4 Implementation Strategies and Monitoring

43. It must be emphasized again that the policy instruments analysed in this document (i.e. MERS, DIRP, SCC and PSP) need to be designed and implemented in a coordinated manner along with other complementary policy measures to create the conducive overall development environment in which target variables will respond spontaneously and favourably to the signals transmitted by these instruments. For instance, even at low interest rates, credit may not be accessible to small farmers without secure title to land. Even attractive positive real interest rates may not have sufficient impact on the inducement to channel savings to productive investment through the official financial intermediation system in an economy characterized by very high inflation rates. MERS will not succeed in preventing capital flight if the government seems politically unstable or consistently pursues anti-developmental policies. Again, MERS alone can do little in the absence of genuine and concrete political commitment to poverty eradication, indigenous development and the eradication of corruption.

44. It should also be recognized that the efficacy of these policy instruments in achieving the objectives of AAF-SAP will be enhanced when they are designed and implemented within the AAF-SAP framework. In other words what is being advocated is not just MERS in place of other exchange rate regimes or DIRP in place of the conventional interest rate policies, but MERS or DIRP designed within the AAF-SAP framework.

45. The overall thrust of AAF-SAP is to generate structural transformation of not only particular national economies, but also of the entire African region, in order to make it a dynamic force in the global economy. This can be achieved only when policy packages within the AAF-SAP framework are adopted and vigorously implemented by African countries in a cooperative way. Otherwise, the adoption of AAF-SAP policies by one country when a neighbouring country does not do so, could even hurt the former country. Clearly, AAF-SAP does not envisage unbalanced regional development through a zero-sum policy game among countries in which one country tries to gain at the expense of others.

46. However, this is not to imply that all the policy instruments treated in this document or others stated in AAF-SAP, should be implemented in a uniform manner in all countries. The broad design and implementation modalities for the policy instruments have been suggested in recognition of the common features of African economies. But the detailed policy design for each country will have to be based on an exhaustive analysis of the peculiar characteristics of the country as well as its historical experiences with the use of different policy designs and regimes. Such policy analysis at the country level is therefore the most immediate follow-up action required for using the policy instruments studied in this document.
PART TWO: Selected Policy Instruments

3. Multiple Exchange Rate System (MERS)

3.1 Exchange Rate Policy in the Developmental Context

47. Economic policies acquire their distinctiveness from the special circumstances of the countries and regions for which they are formulated. Hence exchange rate policy in the context of African countries has a specific character different from its general role in the developed countries. Its distinguishing features derive primarily from the extreme scarcity of foreign exchange as well as the strong and growing demand for it. The basic reason for such characteristics is the excessive import dependence of African countries which consume mostly what they do not produce and produce mostly what they do not consume. Other contributory factors prevailing in most African countries are currency speculation, unbearable external debt service payments, the collapse of commodity export earnings particularly in the 1980s, resulting from the combination of depressed primary commodity prices and the decline in the demand for such exports due to protectionism and rising synthetic substitution for raw materials. These are compounded by increasing demand for capital goods and other essential imports for development as well as the increasingly unfavourable international environment as regards foreign resource flows to Africa.

48. It is largely because of the structural nature of the chronic scarcity of foreign exchange that the identification of exchange rate policy with mere stabilization or balance of payments management should give way to a new approach. This necessitates an increasing acceptance of the central importance of exchange rate policy for long-term development strategy, recovery and the achievement of social equity. There is, perhaps, no other instrument of economic policy that has a comparably pervasive effect on economic decisions as exchange rate policy. At the same time, there is ample literature and accumulating evidence which demonstrate the inadequacy of conventional exchange rate policies such as flexible and fixed exchange rates as well as generalized devaluation for achieving balance of payments viability in the medium-term and promoting accelerated recovery with structural transformation.

49. The pursuit of such exchange rate policies does not take due account of the inability of primary exporters to increase their supply significantly in the short-to-medium-term in order to benefit from devaluation because of the long gestation in primary export production and other supply rigidities. Where the supply of some commodity exports is expanded by several devaluing countries, this tends to lead to increased supply and hence large reductions in export prices because of the "fallacy of composition" so that even when export volumes rise, foreign exchange earnings do not commensurately increase and, at times, may even fall. This is particularly the case with the dismantling of international commodity agreements for cocoa, coffee, etc. Relatively inelastic foreign demand for commodity exports also implies that devaluation is unable to increase export demand significantly in order to raise export revenue. On the other hand, the inelastic import demand in African countries limits the extent to which devaluation can restrict imports and improve the balance of trade and payments.

50. Where the system of auctioning of foreign exchange is adopted there is the question of leakages and distortions in the utilization of the auctioned foreign exchange in the adjustment programmes. Thus, as the system of foreign exchange auction is frequently abused for the import of non-essential goods and services, many African countries that adopted trade liberalization policies are forced to ban such imports. It is for these reasons that AAF-SAP\(^1\) recommends that some adjustment policies should be avoided because they will not bring about Africa's recovery and transformation. These include: generalized devaluation through open foreign exchange markets, currency auction, large and frequent currency

---

1 AAF-SAP, pp 37-8, Table 5.1
depreciations as well as excessive dependence on market forces for ‘getting the prices right’ in structurally distorted and non-perfectly competitive economies.

51. The attempt to use exchange rate policy for the elimination of the parallel market is also like ‘chasing the tail’ or running after a shadow. This is because the operations of the parallel market are governed by many complex socio-economic factors, most of which do not respond to price signals. Examples of such factors include: the extreme shortage of foreign exchange relative to its almost infinite demand; the desire to avoid taxation by not purchasing foreign exchange legally in order not to reveal income level; and, the need to conceal the recondite sources of some of the earnings used in parallel foreign exchange transactions. For these and other reasons, it is rarely true, if at all, that the parallel market exchange rate measures the true marginal cost of foreign exchange, to which its official price must align.

52. In a developmental context, there is also the basic issue of the implications of the different exchange rate policies on the determinants of growth and transformation such as capital formation, development and adoption of technology as well as the establishment of a strong infrastructural base. In the case of the African economies that are still highly dependent on imports for almost all such determinants of growth and transformation, it is more than evident that large devaluation will erode the capacity of domestic savings to finance increased capital formation, technological imports or the expansion of infrastructures.

53. It is against the background of these basic considerations that the application of multiple exchange rates in African countries is proposed in AAF-SAP. Their differentiated structure makes them flexible tools for the pursuit of different objectives with varying priorities. In this way, the multiple rates can be used as a form of price discrimination with low exchange rates applied to high priority goals and higher rates set for low priority objectives. For African countries, the main uses of the multiple exchange rate system would include external debt servicing; import of essential commodities like drugs, petrol, spare parts, capital and other goods, the protection of infant industries, promotion of selective exports, capital inflow, and workers’ remittances from abroad, tourism and restriction of inessential and luxury imports.

3.2 The Basis for MERS

(a) Review of Exchange Rate Policies

(i) Floating exchange rate system

54. Although the floating exchange rate system may be a single or multiple system, it is commonly used as a unified system. In recent years, this floating system has been operated in some African countries through foreign exchange auction on weekly, daily or other basis. Under a flexible exchange rate regime, market forces determine the exchange rate. The alleged advantage of the system is that its open market determination protects the domestic economy from changes in the external world, so that loss of reserves does not necessitate domestic deflationary measures. Also, the depreciation or appreciation of the flexible exchange rate ensures the equilibration of the balance of payments.

55. But the main disadvantage of this system is that by favouring speculators, it makes it rather difficult for the government or Central Bank to regulate the external balance. There are other disadvantages too. The system creates uncertainty about its future level due to the instability caused by its periodic appreciation and depreciation. Its frequent depreciation raises the cost of foreign exchange, increases the local currency cost of imports, particularly imports of factor inputs and, consequently, the costs of domestic production. Also, as its resultant inflationary pressure (i.e., cost-push inflation) falls back on the exchange rate, any inelastic demand for primary exports means that some of the advantages of the floating exchange rate system are lost. Moreover, a free exchange rate may require a larger fiscal outlay and its operation tends to shift inputs to import-competing and export industries. Given the inappropriate choice of most import-substitution industries in Africa and the lack of comparative advantage of African export industries, such shift generally results in the neglect of essential needs such as food.
56. It is because of these disadvantages that developing countries that operate the floating exchange rate system tend to experience severe economic difficulties and abandon it. Thus Brazil’s exchange rate liberalization during 1965/72 was discontinued because it resulted in very low rates of economic growth, and Uruguay’s free exchange rate practices in 1961 and 1987 were abandoned because of their inflationary effects. In Egypt, exchange rate liberalization during 1973/81 led to 75 per cent depreciation of the exchange rate and increased inflation with worsening living conditions for the poorer sections of society. Zaire’s long experiment with the flexible exchange rate system from September 1983 contributed much to severe balance of payments pressure and other economic problems.

(ii) Fixed or crawling peg exchange rate system

57. The fixed or crawling peg exchange rate system may also be unified or multiple. However, it is commonly used as a unified system under the implicit advantage of ensuring stable currency values which encourage trade and investment flows, like the par value system under the gold exchange standard. Under the system, balance of payments deficits are corrected through the use of trade controls and external borrowing.

58. The major disadvantage of the fixed exchange rate system, however, is that it forces the domestic economy to adjust to the requirements of the balance of payments regardless of national priorities. Thus, when there is a balance of payments deficit, controls have to be imposed that may hurt foreign trade and investment, which in turn result in deflationary pressures in the economy.

59. Thus, often, countries that practise the fixed exchange rate system tend to modify it into a crawling peg system. For example, Chile had a crawling peg rate during 1970/82 which in addition to other factors resulted in a foreign exchange crisis in 1982, while Ghana’s crawling peg from 1973/82 was associated with a cumulative devaluation of 58 per cent before it adopted a multiple exchange rate system. Uganda’s fixed exchange system during 1984/86, Zaire’s crawling peg, 1976/83 and Somalia’s, 1978/81 were all converted into dual exchange rate systems because of persistent balance of payments problems.

(iii) Generalized devaluation

60. Generalized and massive currency devaluation has become such a common currency practice in developing countries that it deserves separate treatment. Devaluation is an adjustment measure that is usually applied under any foreign exchange regime for the purpose of eliminating balance of payments disequilibrium. A country devalues by reducing the external parity of its national currency thus lowering the value of its currency in terms of foreign exchange. This involves lowering its export prices in foreign currency and raising the prices of its imports in local currency so that its exports become relatively cheaper while its imports become more expensive. This is supposed to increase the foreign demand for exports and to raise foreign receipts while at the same time reducing domestic demand for imports, thereby decreasing foreign payments and thus improving the trade balance and the overall balance of payments position.

61. The main advantages of devaluation are the elimination of currency over-valuation and the enhancement of the international competitiveness of traded goods of the devaluing country. This is supposed to come about through shifting of resources to import-competing and export industries in order to match the induced switch in expenditures from tradeables to local goods and services. But these benefits of devaluation are often not realized in practice, especially in African countries for several reasons. Firstly, there is the extreme scarcity of foreign exchange in these countries whose demand for imported goods and services is highly inelastic. Secondly, structural rigidities in African countries including a myriad of technical and supply difficulties, also constrain response to price incentives provided by devaluation without assured input supply, and ensure the failure of domestic production to respond to new opportunities in export and domestic markets. Thirdly, devaluation can also be the consequence of speculative activities.

62. Consequently, the disadvantages and perverse effects of devaluation in African countries typically outweigh their alleged advantages. Uncontrollable inflation is one of them. Thus, there is a "growing

---

2 The generally slow supply response in Africa to policy changes was confirmed in a study conducted by the World Bank in 1988, (Adjustment Lending: An Evaluation of Ten Years of Experience, Washington D.C.)
concern that exchange rate devaluation, whatever form it has taken, has led Africa into a period of excessively high rates of inflation in the 1980s. For countries facing given world prices of traded goods, the domestic prices of such goods are their world prices adjusted for changes in the domestic currency value of foreign exchange. Hence devaluation has the effect of causing or fuelling inflation.

63. Tables 3.1 and 3.2 respectively depict the large and persistent generalized devaluation in selected African countries together with the associated high rates of inflation. In Table 3.1, the large devaluation in the 1980s are indicated through the massive depreciations of national currencies for the sample countries, with the exception of the last six countries in the table that resisted devaluation, or whose currency is tied to the French franc and have different arrangements in the determination of exchange rates for the group as a whole. It can be seen in the table that the smallest rate of de facto devaluation over the eight-year period is about 300 per cent for Sudan, while countries like Ghana, Zaire, Uganda and Somalia have over 900 per cent.

64. Table 3.2 shows the rates of devaluation in specific years in a number of countries along with the average and annual rate of inflation during the period 1981/89. The average annual rate of inflation in the sample of eight countries that devalued massively ranges from a minimum of 20.8 per cent to a maximum of 113.9 per cent, whereas the sample of six countries that did not devalue had fairly stable price levels with moderate rates of inflation that range from a relatively low annual average of 4.3 per cent to a maximum of 9.7 per cent. It is thus apparent that generalized devaluation emerges from the two tables as being closely associated with inflationary pressures in African countries. It should however be recognized, that other factors such as structural deficiencies, in both production and consumption, may also have contributed to the inflationary pressure in the high inflation countries. It is, for example, also possible that the inflation rate also depended on the commodity price regime. In many cases if prices are controlled, moderate devaluations may not apparently result in open inflation, which could have recurrent had such devaluations been undertaken in a liberalized price regime framework. Instead, there could be more "suppressed" inflation in the form of shortages of goods and, perhaps, longer customer queues. In addition, the extent of inflation resulting from devaluation will depend upon the tightness of fiscal and monetary policies. Where fiscal and monetary discipline does not exist, even small doses of devaluation can lead to high inflation, whereas if such discipline exists, inflation could be controlled even in the face of relatively large devaluations. But an additional important point to keep in perspective is that with massive devaluations, it is usually extremely difficult to entirely control money supply and budgetary deficits and to such an extent, and in such circumstances devaluations become the basic fuel of inflation.

65. Besides its severe inflationary effect, the theoretical conditions for devaluation to improve the trade balance are typically not satisfied in African countries. More specifically, the classical Marshall-Lerner elasticity condition that requires the sum of the export and import elasticities of demand to exceed unity is not satisfied because of the very strong demand for imported necessities and inelastic foreign demand for African exports. Thus with relatively inelastic demand for exports and imports, devaluation has little or no effect in changing these variables in the context of African countries. Even in cases where export demand is not restricted by foreign protectionism and synthetic substitution, the long gestation period for increasing export production makes their export supply relatively inelastic and unable to benefit from devaluation, at least in the short-term. Agricultural exports are particularly prone to this supply rigidity. Moreover, in countries whose main exports are subject to quota at externally given prices, and which import essential items like petrol, drugs, capital goods, raw materials, spare parts, etc., devaluation has only a negligible effect on the balance of payments.

66. Generalized devaluation also raises the domestic cost of production and thereby decreases the competitiveness of local goods and services. The rising cost of domestic inputs also leads to capacity under-utilization. The change in relative prices that is supposed to switch demand from foreign to local goods after devaluation is also inhibited in African countries because of rigidities in production structures that do not permit much substitution of domestic for foreign inputs, and because of social traits that restrain the change in demand for foreign goods.

---

### Table 3.1
Levels of exchange rate in Selected Countries 1982-90\(^a\) (in US dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana (cedi, ґ)</td>
<td>2.75</td>
<td>90.01</td>
<td>176.06</td>
<td>229.89</td>
<td>303.03</td>
<td>311.53</td>
</tr>
<tr>
<td>Nigeria (Naira)</td>
<td>0.67</td>
<td>3.32</td>
<td>4.15</td>
<td>5.36</td>
<td>7.66</td>
<td>7.95</td>
</tr>
<tr>
<td>Uganda (shilling, USh)</td>
<td>1.06</td>
<td>14.00</td>
<td>60.00</td>
<td>165.00</td>
<td>370.00</td>
<td>379.00</td>
</tr>
<tr>
<td>Sierra Leone (Leone)</td>
<td>1.24</td>
<td>25.59</td>
<td>33.04</td>
<td>39.07</td>
<td>65.36</td>
<td>120.49</td>
</tr>
<tr>
<td>Somalia (Shilling, Sh)</td>
<td>15.21</td>
<td>90.50</td>
<td>100.00</td>
<td>270.00</td>
<td>929.50</td>
<td>1106.00</td>
</tr>
<tr>
<td>Sudan (Pound)</td>
<td>1.30</td>
<td>2.50</td>
<td>4.50</td>
<td>4.50</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td>Zaire (Zaire, Z)</td>
<td>5.75</td>
<td>71.10</td>
<td>131.50</td>
<td>274.00</td>
<td>454.63</td>
<td>508.54</td>
</tr>
<tr>
<td>Zambia (Kwacha)</td>
<td>0.93</td>
<td>12.71</td>
<td>8.00</td>
<td>10.00</td>
<td>21.65</td>
<td>25.65</td>
</tr>
<tr>
<td>Ethiopia (Birr, br)</td>
<td>2.07</td>
<td>2.07</td>
<td>2.07</td>
<td>2.07</td>
<td>2.07</td>
<td>2.07</td>
</tr>
<tr>
<td>Senegal (CFA)</td>
<td>336.25</td>
<td>322.75</td>
<td>267.00</td>
<td>302.95</td>
<td>289.40</td>
<td>284.90</td>
</tr>
<tr>
<td>Cameroon (CFA)</td>
<td>336.25</td>
<td>322.75</td>
<td>267.00</td>
<td>302.95</td>
<td>289.40</td>
<td>284.90</td>
</tr>
<tr>
<td>Cote d'Ivoire (CFA)</td>
<td>336.25</td>
<td>322.75</td>
<td>267.00</td>
<td>302.95</td>
<td>289.40</td>
<td>284.90</td>
</tr>
<tr>
<td>Congo (CFA)</td>
<td>335.25</td>
<td>322.75</td>
<td>267.00</td>
<td>302.95</td>
<td>289.40</td>
<td>284.90</td>
</tr>
<tr>
<td>Central African Republic (CFA)</td>
<td>336.25</td>
<td>322.75</td>
<td>267.00</td>
<td>302.95</td>
<td>289.40</td>
<td>284.90</td>
</tr>
</tbody>
</table>

\(\text{a Average market exchange rates (ae).}


67. The assumption that devaluation can change the relation between wages and prices also disregards distributional equity that is affected by complex socio-economic factors. This is in addition to the fact that devaluation reduces the real value of given nominal wages. For agricultural producers also, even where devaluation increases nominal producer prices in local currency, these could be more than offset by the even higher rate of inflation unleashed by the change in the relative prices of tradeable to non-tradeable goods. Such increases in the domestic price level also reduce the real value of private sector liquidity unless it is offset by commensurate changes in the domestic money supply which, in itself, mitigates the positive effects of devaluation.

(b) Discriminatory Exchange Rate Policy as an Alternative

68. Price discrimination, which is the selling or buying of the same commodity at different prices to different groups of users or consumers in different markets, is common in African countries as elsewhere in the world. It is used, for example, in the sale of electricity, water and export commodities. It has three basic requirements, namely, monopoly power or being the only or predominant seller of the good or service; market segmentation in terms of possibilities of separating markets (buyers and sellers) into different groups; inability to transfer the commodity or service from one market to another because of the nature of the good, long distances between markets, legal prohibition, etc.

69. There are possibilities for market segmentation in so far as trade in foreign exchange is concerned, and therefore for the use of price discrimination. The Central Bank that trades foreign exchange has monopoly power as the sole or dominant trader of foreign exchange in a country; the market for foreign exchange can be separated or segregated for groups of exporters and importers, for external debt service by government, for public and private buyers of foreign exchange; controls and legal prohibition can also be imposed to prevent those who buy foreign exchange in one market or for one purpose and at one price from transferring it for sale in another market or to other uses and at another exchange rate.

70. The price discrimination in the foreign exchange market is applied for acquiring and rationing the use of foreign exchange to different uses or objectives that have different priorities. For Africa, since the servicing of foreign debt, importation of essential goods, the promotion of industries, exports, capital
Table 3.2

Devaluation and inflation in selected African countries (1980=100)

<table>
<thead>
<tr>
<th>Country</th>
<th>Devaluation (annual growth rate of consumer prices %)</th>
<th>Inflation (annual growth rate of consumer prices %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Years of devaluation</td>
<td>Amount of devaluation (%)</td>
</tr>
<tr>
<td>Ghana</td>
<td>April 1983 (de facto)</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>Oct. 1983 (actual)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-1983</td>
<td>200</td>
</tr>
<tr>
<td>Nigeria</td>
<td>July 1986 (de facto)</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>1987/88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(de facto)</td>
<td>50</td>
</tr>
<tr>
<td>Uganda</td>
<td>May 1987 (de facto)</td>
<td>1302</td>
</tr>
<tr>
<td></td>
<td>March-July</td>
<td>100</td>
</tr>
<tr>
<td>Zambia</td>
<td>1975</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>1978</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1983</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>1989</td>
<td>45</td>
</tr>
<tr>
<td>Zaire</td>
<td>Sept. 1986</td>
<td>345</td>
</tr>
<tr>
<td>Sudan</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Somalia</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Average for the countries</td>
<td></td>
<td>81.1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Senegal</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cameroon</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Congo</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Central Af. Rep.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Average for the countries</td>
<td></td>
<td>6.5</td>
</tr>
</tbody>
</table>

Note: n.a = not available.


Inflow and similar major objectives are more important nationally than the liberalised import of non-essential goods, a lower exchange rate is justified for the first set of objectives, while a higher or penalty exchange rate should be applied to the second set of uses of foreign exchange.

71. But it is not just because the separability of international transactions into different markets or categories exists that multiple rates can, in theory, be envisaged for different transactions; equally important is the possibility of easily maintaining such segmentation across priority sectors over reasonable periods of time in so far as there is seriousness of purpose, honesty and dedication on the part of the monetary authorities.

72. MERS is thus used in four common contexts; namely, structural transformation, balance of payments adjustment, mechanisms of protection and taxation of international transactions. The use of
multiple exchange rates underscores the differences between the monetary approach to adjustment and a developmental approach. These differences, in turn, emphasize two critical points. First, when the underlying causes of balance of payments deficits are real or structural, as in African countries, monetary adjustment through generalised devaluation as in orthodox adjustment programmes typically fails. This is because the mechanistic monetary approach addresses only the symptoms of the problem and, thus at best, provides only temporary relief from the crisis, which tends to recur or even deepen. As such, the adjustment with transformation required to eliminate the structural causes of balance of payments disequilibria cannot be addressed within such simplistic monetarist framework.

Second, in most Third World countries, and particularly in Africa, MERS has been and continues to be, used and advocated primarily in order to promote economic recovery and development. This is a much higher national priority and larger pre-occupation in Africa and other developing regions than monetary or balance of payments stabilization. Indeed, in these countries, persistent monetary or payments imbalances are typical reflections of underlying underdevelopment. In these circumstances, the restriction of MERS to monetary adjustment or the elimination of balance of payments is thus an inappropriate transfer of its function from the advanced countries to the developing regions.

In developing countries, trade policy is an integral component of development policy. This requires resource re-allocation among sectors, for example, towards domestic industries and selective export expansion. These are precisely some of the major objectives of the application of MERS in African and other developing countries.

It may be argued that rather than using multiple exchange rates, other measures such as fiscal transfers or taxes should be used for the above objectives. But such alternative measures are typically more cumbersome (e.g. they may require special taxation and long legislative processes and face serious political opposition, etc.), less efficient and more costly than exchange rate discrimination.

(c) MERS: Advantages, Limitations and Costs

It combines the main advantages of the other exchange rate regimes and avoids most of their disadvantages. Multiple exchange rates are often adopted to avoid generalized and massive devaluation and its disruptive effects.

In developing countries, MERS is also useful for promoting structural transformation in two main ways. One is through the diversification of domestic production structures which can take the forms of promoting import-substitution by granting protection to local industries, offering premium exchange rate that constitutes a subsidy to some activities and applying a penalty exchange rate to discourage others. For countries at early stages of industrialization, this is a very stimulating policy. Brazil used MERS as a deliberate policy to stimulate national development in the post-war period, and Egypt has been using MERS since 1981 to boost its industrialization and manufactured exports and to raise living standards. The other transformational use of MERS is for selective export promotion in some industries. When the multiple exchange rate system includes a free exchange rate, this gives the needed incentives to export industries and encourages capital inflow that can be used to expand the export sector. This involves the application of a favorable exchange rate to such industries in a form of export subsidy or export rebate that reduces the production cost of such activities and raises their international competitiveness. In the post-war era, Uruguay applied the most favorable rate of its multiple rate system for 'wool tops' in order to penetrate the international market for a product that had been dominated by European producers. After 1982, MERS was also operated with the main objective of re-establishing the long-run competitiveness of the economy.

Import rationalisation is another major advantage that can be derived from the use of MERS in many developing countries. In this context, the multiple rates are used trade policy in lieu of tariffs. In the short-run while domestic production is being stimulated a low exchange rate can be maintained for essential imports to keep their total cost low so that the depreciation of the domestic currency during adjustment does not affect the majority of the population with low income. A higher exchange rate is then applied to non-essential imports similar to a high tariff to reduce import demand. Such a multiple exchange rate can also be used as an anti-dumping device against cheap imports that may ruin domestic infant industries or import substitutes. One aspect of the flexibility of MERS an important point to stress.
is that such a multiple exchange rate has a much lower inflationary effect especially with respect to the
cost of living index of the low income groups.

79. MERS also enjoys the advantage of promoting confidence in the economy and encouraging the
inflow of workers' remittances. This is particularly the case where increased returns on holdings of local
currency relative to foreign exchange are offered through a combination of changes in interest rates and
the rate of exchange. This is one of the cases for the simultaneous use of differential interest rate policy
(DIRP) to supplement MERS. Egypt has used multiple exchange rates very successfully in this way to
attract workers' remittances from neighbouring oil producing countries. This was done in 1968 with an
official rate of LE 0.34 to the US dollar and another rate of LE 0.58 per dollar, and again in 1981 and 1987.
Other countries like Ghana and Morocco used multiple exchange rates to attract remittances and promote
tourism, while Zaire used its own dual rates during 1983/84 to curb diamond smuggling.

80. With unbearable external debt service obligations, African countries can drastically reduce their
debt service payments in local currency by adopting multiple exchange rates. This can be done by
applying a favorable rate for debt servicing relative to other external transactions. In Egypt during
February 1988, the multiple exchange rate system allowed authorized banks to sell 10 per cent of their
monthly foreign exchange receipts for external debt service. Zambia has been using multiple exchange
rates to reduce the local currency cost of its external debt service.

81. The control of capital flight is another important advantage of MERS. When a high exchange rate
is applied to private transfers abroad, it discourages the repatriation of capital and encourages capital
inflow. This is critical for African countries that have been suffering from massive export of capital,
especially since the 1980s.

82. Like all other economic policies, however, MERS also may have some shortcomings. For example,
free exchange rates in the context of MERS may depreciate. But the extent of such depreciation and its
impact may be mitigated because not all foreign transactions are subject to such depreciating effects.
Similarly, if MERS involves some crawling peg exchange rates, they may be over-valued although the
extent of the over-valuation and its effects will be less than under a unified fixed or crawling rate because
of the possible counter-veiling or damping effects of other rates in the multiple exchange rate system.

83. MERS also has practical limitations. First, there may be fraudulent transactions across foreign
exchange markets. To overcome this problem, there is need to strengthen existing institutions and
penalise heavily corrupt practices. Second, MERS may become too complex with a multi-tier system that
is difficult to design, apply and monitor effectively. To avoid this shortcoming, multiple rates are usually
made as simple as possible. As for the cost of operating MERS, it can be made much less than the cost
of managing other discriminatory policies. Moreover, such operating cost is substantially less than the
associated economic and social benefits of MERS for as long as it is required to achieve the objectives of
transformation and should, therefore be kept under constant review.

84. Overall, however, in the context of a development approach, the many advantages of MERS
outlined in paragraphs 73 to 78 coupled with the structural rigidities that militate against the effectiveness
of fixed exchange rates as outlined in paragraphs 46 to 48, multiple exchange rates are a viable and
desirable alternative policy instruments. This is particularly the case when these multiple rates consist of
a few rates that have fixed and free components. The combined benefits of such mixed fixed-flexible
exchange rates tend to more than offset their possible shortcomings. The multiple rate system is also
more relevant to Africa's recovery and transformation objectives — its gains are more significant and its
defects are relatively less than those of other exchange rate policies. It is from these considerations that
the attractiveness of the multiple exchange rate system is derived.

3.3 Design and application of MERS

85. The practical design of MERS for African countries should be based on the lessons of experience
accumulated from its past and current application in various countries in Latin America and Africa.
These experiences underscore some basic similarities with respect to the circumstances that led to the
adoption of MERS, its practical design, implementation requirements and monitoring procedures.
(a) Lessons of Experience

86. In Latin America, MERS has been designed and used widely since the 1950s and it is still being applied in some countries of the region, especially since the crisis of the 1980s. One of the major reasons for the adoption of multiple exchange rates in Latin America was the inadequacy of official parity rates for restricting import demand, while devaluation was seen as fuelling inflation and raising import cost. Accelerated development and export diversification were also very important additional reasons. Indeed, it should be noted that when many of these countries dismantled their multiple exchange rate system, they did so by imposing export taxes or by retaining exchange controls. In most Latin American countries which applied MERS, the common problems with its application were (a) the inclusion of most imports under the preferential exchange rates and few luxury items under the higher rates, such that the multiple rates were inadequate for suppressing excessive imports and (b) the tendency to make the multiple rates increasingly more complex due to the pressure of exporters and importers to introduce new rates.

87. In African countries, multiple rates have been designed and applied, and are still used, mainly for dealing with balance of payments deficits and external debt servicing. The standard context has been short-term stabilization or structural adjustment. Hence, the African design and use of MERS have tended to be for mainly monetary adjustment and over relatively short periods. Consequently, African countries have not, in general, designed and applied multiple rates for adjustment with transformation, or as a deliberate development policy and for sustained periods as in Latin America — a tendency which could account for the poor performance of MERS in Africa. Moreover, whereas the design and use of multiple exchange rates in Latin American countries typically involve two or more legal exchange rates, there is a tendency to define dual exchange rates for African countries as involving an official rate and a parallel market rate which implicitly is illegal — a perception and application that has often prejudiced the prospects and feasibility of MERS in Africa.

88. Overall, the cases of successful design and application of multiple exchange rates have typically hinged on the satisfaction of some basic conditions. One of these is simplicity of design, especially where there are fixed and free rates. The provision of adequate time for real adjustment to occur is also essential when the application of multiple rates has developmental objectives. The use of complementary policies in the design and use of MERS such as export incentives, and restrictions on imports is also critical. The avoidance of massive and frequent devaluation, high inflation and other destabilising policies, are essential in the design and application of MERS. The maintenance of effective discipline in foreign exchange allocation to priority uses, and fiscal and monetary reforms are necessary for the success of MERS.

89. Conversely, the cases of poor design and application of MERS are those that have tended to avoid these basic conditions. They also involved the application of many complex rates, currency auction, large deficit financing with high rates of inflation, frequent currency devaluation and interference with the regulatory mechanisms of MERS.

(b) Operationalization of MERS within AAF-SAP

90. In the context of AAF-SAP, the operationalization of MERS requires the clear articulation of its objectives. It also requires that the conditions for its effective use and practical implementation are fully met.

(i) Objectives to be realized

91. The recovery and development objectives of AAF-SAP which can be pursued with MERS include regional food self-sufficiency; poverty alleviation through the expansion of agriculture, rural development and the satisfaction of critical needs; encouragement of capital inflows and restriction of outflows; achievement of self-sustaining development through the strengthening and diversification of the production base, increased manufacturing and higher capacity utilization through essential imports; improvement in the balance of payments; and, lessening the external debt burden in local currency.
(ii) Approaches to MERS

92. International transactions can be separated into different groups which can be distinguished by different groups of commodities, financial assets or capital transactions and services. Based on these distinctions, the following exchange rates can apply:

- subsidy exchange rates for some exports and imports — for essential imports like drugs, fuel, capital goods, etc. and for foreign debt service, the promotion of basic industries, selected exports, tourism, etc;
- penalty rates for some exports and imports;
- uniform dual or different rates for capital flows and investment returns;
- asymmetrical dual rates for goods and capital flows;
- exchange spread or margin between buying and selling exchange rates.

93. Out of these different approaches to MERS, the commonest ones that are used by most countries are official and non-official, commercial and financial exchange rates. But this does not limit these multiple rates to only two. The main reasons for the attraction of these multiple rates are threefold. Firstly, they are usually non-complex in design and hence avoid the difficulty of application and enforcement across many transactions. Secondly, these rates are not usually applied to the capital account except for external debt service. Thirdly, they can be designed in such a way that some are fixed or pegged within a range or band as managed crawling peg rates, while others are managed float or managed free rates so that they enjoy the advantages of fixed and floating rates but minimize their disadvantages.

94. Countries in Special Situations - There are some special considerations in the application of MERS with respect to two categories of African countries, namely:

(a) Currency Union Countries - For countries that are members of currency unions such as the CFA zone, the use of MERS has to be arranged with the members of the currency union in order to ensure that changes in parity between the currencies of the union has to be acceptable to all concerned;

(b) Integrating countries - MERS poses no problems for economic integration that involves the removal of barriers, and for production integration to exploit economies of scale. Different kinds of multiple currency practices in some African countries are also compatible with financial integration. Thus if there is a payments or clearing arrangement among countries, their use of MERS will require them to use an agreed unit of account, e.g., UAPTA or an external currency like the dollar. Exporters of each commodity receive in their local currency the amount established by the corresponding exchange rate, and importers will pay in the unit of account, the rates which the authorities set for transactions. The clearing will then be among central banks in units of account which may or may not be converted into other currencies, depending on the agreement among the integrating countries. Hence multiple exchange rates need to be harmonized among integrating countries.

95. When MERS includes free market exchange rates for capital movements or tourism, such transactions can be settled in two possible ways. One is to leave them out of the clearing arrangement or financial integration. Another is to channel such free market transactions through the clearing arrangement and realize them in the currencies agreed upon. Thus in order to facilitate the settlement of multilateral payments when some of the members have MERS, all member countries should respect and reinforce the exchange regulations.

(iii) Pre-requisites for Effective Use of MERS

96. In addition to the general conditions for the application of discriminatory exchange rates, the basic conditions for the effective use of MERS are the separability of foreign exchange markets; the elimination of fraudulent transactions across exchange markets due to the existence of a foreign exchange discount between the markets; and, the application of a simple set of multiple rates. The use of MERS with or without foreign exchange allocation — depending on its relative supply — also requires efficient administration, control and enforcement to avoid foreign exchange speculation and corruption. There is also need to design relevant complementary policies such as differential interest rates, non-inflationary
fiscal and monetary policy as well as ensure greater mobility of capital. The effective monitoring of the implementation of MERS is also important.

(iv) Modalities for the Operationalization of MERS

Administrative and institutional arrangements

97. **Responsibility for implementation** - This should be vested in an increasingly autonomous Central Bank under the overall guidance of the Ministries of Finance, Planning and Trade. The specific responsibilities for the design, implementation and enforcement of the rules and controls of MERS should be defined as clearly as possible at the highest possible official level of executive authority.

98. **Monitoring Mechanism** - This should be at ministerial level. Its functions should be the systematic monitoring of the actual implementation of MERS, so it should ensure the complete separation of foreign exchange transactions or markets in order to eliminate fraudulent transactions and corruption; the enforcement of the discipline and controls of MERS through the imposition of binding sanctions against violations of its regulations; ensure the prompt correction of errors of design and implementation; and respond to unforeseen developments during the application of the multiple rates.

Other aspects of modalities

99. The other aspects of the modalities include the following:

- To minimize administrative complexities and costs, MERS should be designed and applied through a combination of managed crawling rates with a free rate.
- In changing from one exchange rate for all transactions to MERS, essential imports should attract lower rates with higher rates for other transactions, especially as an incentive for capital inflows and a disincentive for non-essential imports;
- The free or flexible exchange rates should be organised through banks or exchange bureaux in order to achieve their stability within range;
- Multiple exchange rates should be integrated with fiscal, monetary and price policies in a non-inflationary direction;
- MERS should be considered as a policy instrument that requires a high level of administrative capability and discipline so that its controls can be maintained effectively;
- Complementary measures are required in order to ensure the effective achievement of the objectives of MERS, e.g., reduction of bank lending reserves and fiscal deficit to maintain low rate of inflation, use of differential interest rates and selective credit control and creation of confidence in the economy through the maintenance of a stable economic environment;
- Adoption of policy actions which can act on both the supply and demand sides of the economy. Reforms such as changing production structure and consumption habits, improving the system of taxes and subsidies and the avoidance of generalised export promotion that may reduce the supply of commodities for domestic consumption and fuel inflation are essential here.

4. Differential Interest Rates Policy and Selective Credit Control

4.1 General Review of Interest Rates Policies and their Impact

(a) Introduction

100. It is beyond doubt that the interest rates do have a substantial influence on the rate and pattern of economic growth through its influence on the volume and disposition of savings. The theory of interest rate has gained prominence in industrialized market economies which have advanced and integrated
money and capital markets and where private investment constitutes a significant share of total investment. However, in developing countries in general, Africa in particular, none of these factors currently exist.

101. The developing African countries with different institutional structures there is need to use differential interest rates. The essence of differential interest rate policy in those countries is to release real rates of interest to disclose the scarcity of savings in order to stimulate savings, to raise accessible rates of return on investment, and to discriminate more effectively between investments so as to promote productive investment and discourage speculative unproductive investment. The differential interest rate policy is, therefore, of the temporary and intermediate nature until such time as the market distortions are removed and the market forces of supply of and demand for loanable funds are permitted to function properly. Notwithstanding the doctrinaire stance against all forms of government intervention in the credit process, it is nevertheless argued here that there is need to minimize the divergence between the allocation of resources based on the free interplay of the market forces and the one based on government development priorities in developing African countries.

102. In addition to the exchange rate policies considered in Chapter 3, many African countries have to use various monetary policy instruments including credit control and interest rate adjustment. However, in many cases, the use of a unified interest rate policy within a framework has not achieved the significant results of influencing the volume and productivity of investment as well as the level and disposition of savings. High unified lending interest rates have tended to encourage speculative rather than productive activities and have significantly tended to fuel inflation. These interest rates have also been of little relevance to the rural sector due to its weak and narrow financial structures. Even in the developed market economy there is no one purely single interest rate as such. The prime rate and the discount rate still exist.

103. There is no doubt that one of the most important factors that affects the role and scope of interest rate policy in developing African countries is the level of development of their financial structures. In most developing countries, the ratio of currency to the stock of money is relatively large (more than 50 per cent) and this, together with the small number of banks, affects the capacity of the banking system to create additional credit on the basis of an increase in the reserves of commercial banks. Also the largely subsistence part of the economy including the informal sector is not susceptible to banking influence and, because of the fragmentation or non-existence of money and capital markets, many monetary instruments which can be used effectively in industrial countries, are subject to severe constraints in developing countries. On the whole, the effectiveness of interest rate policy in developing countries depends on factors such as savings habits, extent of monetization of the economy, provision of adequate banking services, availability of alternative financial assets, inflation, and the role of foreign capital. Since the relative importance of these factors differs among countries, it is quite logical that there are differences in the intensity of use and degree of success of interest rate and credit policy.

104. In African countries, the imperfections in the money and credit markets cannot be eliminated or reduced by merely allowing single interest rates and credit to operate freely as in well integrated financial systems that exist in developed countries. This could, perhaps, be explained by the fact that in most African countries, financial markets are very narrow because of the low income of the majority of the population and the limited degree of monetization. In many of these countries, money markets are dominated by one or two banks with important external controls in decision-making that can exercise monopolistic or oligopolistic control over interest rates. Such institutional and structural features may prevent the banking system from operating competitively, even if there is so-called “financial liberalization”.

105. It is in the light of these constraints that distinguishing the use of differential interest rate policy (DIRP) and selective credit control (SCC) becomes important for interest rates on loans for speculative activities from those for productive activities so as to shift resources to productive use. Moreover, the combination of the two categories of rates should result in positive weighted interest rates for savings. Such policy will lead to increased diversification of production, enhanced production and efficient resource use, greater and more efficient domestic resources mobilization, improving human resource capacity, strengthening the scientific and technological base and increased vertical and horizontal diversification.
106. The question of market segmentation is the critical issue in favour of discriminatory pricing in the financial sector in developing countries. Under DIRP and Selective Credit Control (SCC) both price discrimination and quota allocation of credit are involved. The issue of leakage of funds from formal to the informal credit markets, and from the low interest loans to high interest loans is important to the operation of interest rate and credit policy in developing countries. There is considerable inducement to shift borrowed funds from high development priority, but perhaps lower immediate rate of return activities, towards luxury good purchase and/or speculative purchases for urban property or intermediate good stocks. A related concern in favour of DIRP and SCC is the inability of the formal urban financial market to provide adequate and timely credit to a scattered mass of small producers and farmers. An understanding of the lending risks and the appropriate scale of operations, leaving aside such complex issues as the meaningfulness or otherwise of distinguishing between "production" or "consumption" loans for an impoverished farm household is essential to the operation of a SCC under an overall policy of inducing the banking sector to be profitable and contributing to the development. Thus, the DIRP involves a two-tier interest rate with high interest charges on borrowing for speculative or nonproductive activities which will subsidize low-interest borrowing for productive purposes in order to channel credit to key industries and priority sectors. SCC has a similar objective in addition to that of offsetting the harmful effects of inflation.

(b) Impact of Interest Rate Policies

(i) Interest Rate Policies and Savings

107. It is paradoxical that most empirical results have not been able to establish a clear positive relationship between interest rates and the level of savings. While it would normally be expected that savings will be positively related to real interest rates and to disposable income, the opposite is sometimes the case, particularly in developing countries. Theoretically, it is argued that the elimination of financial repression or controlling of interest rates would raise the average rate of return on savings and would, consequently, result in a continuing increase in the flow of savings as a proportion of income. It is well known that the low saving rates in developing Africa are also related to factors other than interest rate; namely, low income, high and skewed consumption patterns and structural deficiencies which constrain the ability of African governments and people to raise revenues necessary to finance development expenditures. The low level of per capita income in the majority of African countries is the principal reason for low savings, despite increase in saving deposit rates.

108. The view that interest rates play only a minor role in the determination of savings is sometimes supported by empirical results. In a study of African countries conducted by the African Centre for Monetary Studies (ACMS) in 1985, it has been shown that changes in the real interest rate have mixed results. While in some countries there is a positive correlation between savings and the real interest rate, in others, a negative relationship prevails. This stems from the fact that in several developing countries, a large proportion of savings is not held in the form of financial assets as in advanced countries, but in the form of real assets (real estate, consumer durables, precious metals, foreign assets, etc.). The importance of this empirical ambiguity about the effect of real interest rates on savings is that policy makers should not be dogmatic in designing interest rate policies. Rather, they should be flexible enough to take into account the realities of their economies. Moreover, we know that theoretically, savings are a function of income.

(ii) Interest Rate Policies and Investment

109. One of the major reasons for proposing a differential interest rate policy is the concern about productive investment. It is therefore basic to have a clear idea about how interest rates - nominal or real, controlled or market-determined - have empirically influenced the volume and productivity of investments. Theoretically, explanations of investment behaviour posit an inverse relationship between interest rates and investment demand.

110. Empirically, studies in developing countries have shown the following general trends in the relationship between interest rate policies and investment:
- a tendency for increases in interest rates to reduce the level of investment by raising the cost of financing certain investments above their possible rates of return;
- because of the substitution of alternative mechanisms for raising funds, including community financing or external aid, the empirical significance of interest rate as a determinant of investment is often difficult to establish in developing countries;
- governments have usually benefitted from the adoption of low or preferential interest rates since they are usually the biggest borrowers. If government credit is directed to laying down the industrial base, social services, agriculture and basic infrastructure, then the use of preferential rates has usually been justifiable;
- most interest rate policies, especially in African countries, have tended to fail to discriminate adequately between more and less productive investment possibilities.

(iii) Interest Rate Policies and Inflation

111. It is proposed that real interest rates — the nominal interest rates adjusted for the expected rate of inflation and weighted between speculative and productive loans — should be kept positive in order to increase the productivity of investment, since economic development depends not only on the volume but also on the productivity of investment. In the case where inflation rates exceed nominal interest rates, a negative real rate of interest occurs and this will tend to encourage speculative activities with low marginal rates of social return, such as the accumulation of inventories for inflation-hedging purposes and speculative commodity or real estate transactions, and thus reduce the productivity of investment. The transfers of financial resources into inflation hedges will further aggravate the scarcity of funds for productive and transformational investment and add to inflationary pressures. But the achievement of positive real interest rates requires the effective control of inflation rather than raising nominal interest rates excessively. Thus in many Latin American countries with annual rates of inflation of over 1,000 per cent there are no nominal interest rates which can yield positive real interest rates.

(iv) Interest Rate Policies and Income Distribution

112. There are, as yet, no solid empirical studies that show the effects of interest rates on income distribution. Some studies have argued that low interest rates - across the board or for specified types of credit - do not have the redistributive impact often expected of them. For example, it is contended that for agriculture, repressed or preferential interest rates may have perverse effects because of the tendency for larger agricultural units to receive the lion's share of preferential credits. Other studies, however, argue that if well managed, preferential interest rates benefit poor farmers, small businesses and sectors like housing for low-income households.

(c) Evolving Issues and Problems

113. Generally, the theoretical precepts of interest rates have been unable to fully or satisfactorily explain the behaviour of interest rates in developing countries. This is perhaps due to some basic difficulties. Firstly, the estimation of monetary models has tended to perform poorly presumably because of data constraints. Secondly, since both expected inflation and consequently the expected real rate of interest are unobservable variables, the attribution of movements in interest rates to either of these variables has depended essentially on the use of unreliable proxies to explain interest rate behaviour in developing countries. Thirdly, in a developing and financially repressed economy, interest rates do not behave in the same manner as in a financially developed and relatively stable system in developed countries.

114. In developing countries, the focus on interest rates has shifted to examining how they can be used to serve the purpose of economic development. Indeed, in countries where money and capital markets are less developed and imperfect, the authorities need to take into account both the social and economic rates of return on different investments on the one hand, and the social and economic costs of funds used to finance them, on the other. Thus, in order to offset the effects of market distortions, most developing countries have implemented corrective measures on interest rates through direct or indirect administrative mechanisms.
Developing countries, however, continue to be advised to maintain positive real interest rates (i.e. nominal interest rates above the rate of inflation), mainly through adjustment in nominal rates by liberalization or discretionary action, rather than through the control of inflation. The resulting high nominal rates have tended to encourage speculative activities and discourage the expansion of the productive capacity of the economy. But given their development concerns, developing countries have tended to maintain administrative ceilings on nominal rates such that variations in inflation rates have determined variations in the real rates of interest. Countries with relatively high average inflation rates have recorded relatively low average real rates of interest and, in many cases, even negative real interest rates. This has been the case particularly for Latin American countries. The financial growth in these countries has been seriously eroded during periods of inflation (e.g. in Brazil) but also considerably restored through deliberate policies of high interest rates on deposits (e.g. in Chile).

The arguments behind this approach of controlling nominal interest rates to relatively low levels center round the stimulation of the level of investment by keeping financing costs low. Usually in capitalist economies, private rates of return generally guide most investment decisions. But, in developing countries where such rates of return diverge widely from the social rates of return, the authorities frequently intervene to administer interest rates and allocate credit in order to offset the divergence, typically through low interest rates accompanied by selective credit measures to priority activities.

Likewise, the hypothesis that domestic interest rates are determined, in the short-run, by international capital flows and that these domestic rates are tied to interest rates in industrialized countries adjusted for devaluation (interest rate parity theory) is not supported by experiences in developing countries because of structural and financial imperfections. Tying domestic interest rates to international rates does not guarantee positive real interest rates. The more important aspect of the hypothesis is that rising world inflation fuels domestic inflation in developing countries resulting in negative real interest rates.

The new perspective for developing countries rightly stresses the need to increase the reliance on interest rate policy for the mobilization of savings, the allocation of resources to productive uses and the distribution of income. While some of these objectives might require developing countries to maintain positive real interest rates, others require a discriminatory approach in order to reflect differences in risk, maturity and costs, and to deliberately promote economic development and discourage speculative activities.

In addition to regulating nominal interest rates and the overall level of credit as a means of guiding economic activities in the development process, developing countries have also attempted to influence the distribution of credit among various activities through the use of selective credit control (SCC). The basic assumption underlying such selective credit policies is that it is possible to direct resources to particular productive activities through the reallocation of financial resources. This development approach which has wide support among developing countries has become anathema in the recent advocacy of the supremacy of market forces. The market-oriented policy advisers argue that market determined interest rates, in combination with appropriate external and domestic macro-policies, are the fundamental condition for channeling financial resources at the “right prices” through the banking system from savers to investors. Yet, resistance to the liberalization of interest rates is still strong in most developing countries. Thus, no clear consensus has been reached on whether the financial system — distorted as it is in developing regions like Africa — will efficiently operate within the context of free markets to provide a pattern of credit allocation that is socially and economically most desirable and effective.

There is, of course, the issue of whether under DIRP and SCC, investment expenditure decisions depend on the availability or cost of credit. An attempt to provide a rationale for the link between expenditures and credit was first made by the neoclassical hypothesis, which stipulates that investment is financed by borrowing, the release of cash holdings and sale of financial assets. In this context, investment is a decreasing function of interest rate. Thus once the interest rate is given, investment demand and consequently financial flows, are determined. But, at any given level of interest rates, if the individual is not permitted to borrow as much as he wants, and if attempts by him to offer a higher rate of interest than quoted are not successful, then obviously, the level of investment is not only a function
of the cost of financing, but also of the amount of credit available. In this situation which involves rationing, the firm would borrow up to the constrained level of credit supply, irrespective of the interest rate.

4.2 The Basis for Differential Interest Rates Policy and Selective Credit Control

121. In recent years persistently high interest rates in developed and developing countries have focused attention on interest rate determination and its relationship with inflation. The basis for factor of the DIRP and SCC is the fact that commercial banking in Africa is still underdeveloped. The ratio of bank deposits to GDP averages approximately 15 per cent and the proportion of demand deposits to the total money supply averages between 25 and 30 per cent whereas in developed countries the ratio usually exceeds 30 per cent and the money supply consists largely of the deposits of the commercial banks. In addition, the number of banks relative to population size is also very small. The money supply being largely composed of currency rather than credit deposits in the banks makes it difficult to operate smoothly differential interest rates policy and credit control. Depositors still regard the interest rate structure as too compressed and therefore prefer to hold savings deposits and term deposits of shorter maturity. Banks sometimes do not encourage longer-term deposits because the spread between interest rates paid on those deposits and rates on loans is too narrow. Although, rates on lending to priority sectors like agriculture and industry have been kept relatively low in order to facilitate credit use by these sectors, banks are usually reluctant to lend to these sectors because of the relatively higher risk than sectors like commerce. Often, the structure of interest rates does not also encourage lending to priority sectors because of low productivity in these sectors as a result of the failure to make use of technology advances and other innovations achieved abroad. Egypt gives a typical pattern of skewed lending in priority areas. In Egypt the ratios of loans to agriculture and industry out of the total loans from commercial and investment banks were 2.5 per cent and 39.9 per cent, respectively, in 1988 whereas loans to service and commercial sectors represented 51.8 per cent out of total loans.

(a) Priority Allocation of Resources

122. Differential interest rates have been used extensively to serve the objective of channeling credit to key industries and priority sectors. The lending institutions, which are typically and predominantly influenced by central bank policy, could be compensated for low interest rate loans to priority sectors through the rediscount system, lower reserve requirements, or limitations imposed on normal credit expansion to non-priority sectors.

123. Selective credit control has been used as a tool to offset the harmful effects of inflation and excessive investment in speculative inflation hedges. Selective credit control can allow a developing country to reach a better development pattern of investment. For example, if a large budget deficit or surplus in the balance of payments cannot be prevented, a secondary expansion of bank credit could be mitigated with selective credit measures. In addition, if inflation is likely to be concentrated in some areas (for example, imports), then selective controls can be good substitutes for a general restriction on credit.

(b) Development Objectives

124. There is a widespread tendency, emanating from development concerns among developing countries, not to depend on one single interest rate that is determined solely by the market. This is because, in these countries, interest rates are expected to serve various policy objectives in addition to bring the demand and supply of funds into equilibrium. As a result, there are development justifications for applying differential interest rates. Such reasons may include market failures, economies of scale, external economies and diseconomies and infant industry requirements as well as political and social considerations, such as the special needs of industries of strategic national interest, housing needs of low income groups, etc. However, the selection of priority sectors and activities for preferential interest rates must be specific to the structural conditions and policy goals of each country. Also, the selection may vary from one period to another depending both on the evolution of the country’s structural conditions and government policy goals.
125. While in developed countries the monetary authorities play a straightforward monetary control role in the economy, in developing countries, the monetary authorities have a much more important role as intermediaries between savers and investors. However, because of economic dualism, the modern banking system in developing countries usually tends to serve the mainly well-established urban borrowers. The financial needs of small-scale urban operators and the population of the rural areas are neglected or met by the informal small-scale moneylenders. The central bank, the guardian of the financial system, could, therefore, subsidize commercial banks and other financial institutions so that they can make credit available not only to rich urban borrowers but also to poor rural borrowers at low lending rate. Thus, such a financial dualism of an underdeveloped economy dictates the use of differential interest rates for particular activities. Special considerations should apply to situations where a large segment of the population (the urban poor and rural population) has no access to the services of savings or credit institutions.

126. The development objective of the transformation of the economy also dictates the use of differential interest rates. A development strategy that relies on savings as a major source of financing investment for transformation requires discriminatory approaches in order to stimulate savings and productive activities. Of particular importance is the need to minimize the divergence, in developing countries, between the allocation of resources based on the free market and the one based on development priorities. There is always the possibility in developing countries that uncontrolled operations of free market forces may result in a disproportionate allocation or misallocation of available funds to low priority areas as against high priority areas due to market imperfections, structural rigidities and socio-cultural factors. The government may, therefore, impose a low ceiling for interest rate in high priority areas that contribute to the development of the countries and leave the market to determine the interest rate in low priority or speculative sectors, so that the resulting weighted average interest rate remains positive to attract more saving. It is also rarely appreciated that, empirically, a number of developed capitalist economies have actually had government-determined interest rates. It is well documented that a number of OECD countries fixed their interest rates either through government ceiling or by mutual agreement among banks and savings institutions.

127. Contrary to traditional belief, the question of interest rate determination is so complex that it is not really appreciated that, more often than not, there is no good economic basis that can solely determine what the level or structure should be. Even in the so-called efficient free-market determination of interest rates, it is rarely fully understood why the free market can lead at times to much higher or to much lower rates than the equilibrium rate. While, in essence, the free-market determined real interest rate has the inevitable implication that the equilibrium real rate of interest must be positive because it must be equal to the rate of return on capital, yet, it has been found from IMF financial statistics, 1974-1984 that the real interest rate even in the United States over a ten-year period exhibited such unpredictability that in some cases it was highly negative, while in other cases it was highly positive.

128. From a survey of interest rate policies in selected developing countries by the World Bank, it was found that, empirically, all countries surveyed maintained substantial direct financial control with three types of typical instruments; namely, regulations on the portfolio composition, i.e., requirements to devote a certain portion of lending to specific activities; Central Bank rediscounting of credits to priority sectors usually at subsidized rates; and, control of financial intermediaries [Hanson and Neal 1985]. Hence, it was observed that:

- all of the sampled countries also maintained some form of administered interest rate regime, the principal differences being in the relative size of the directed credit programmes and in the interest rate differentials between preferential and non-preferential credits;
- all countries exercised control over the allocation of credit with the fraction of credit affected by direct allocation ranging from 100 per cent in Nigeria in the past to nearly 55 per cent in Peru;
- the differentials between rates on bank deposits, general lending and preferential lending rates were small in low inflation countries and quite large in the high inflation countries.

129. The empirical evidence in Africa also shows that in most countries the interest rate structure has been shaped by the control and regulatory measures of the monetary authorities. Most countries were
involved in the provision of not only general guidelines on interest rate determination but also of detailed interest rate structures as well [Lanyi and Saracoglu 1983; ACMS, 1985].

130. In most developing countries interest rates are determined administratively, typically through legally imposed ceilings on lendings and deposit rates. In many of these countries, official control over interest rates is made relatively easier because of the few large banks which can be influenced by government legislation in a relatively straightforward way. In some developing countries, however, interest rates are administered in a flexible manner in an attempt to maintain market-related interest rates.

(c) Advantages and Limitations of Differential Interest Rates and Selective Credit Policy

131. An effective interest rate policy seems to depend on the prospects for growth of the financial structures of African countries. A differential interest rates policy may have both advantages and some limitations if not properly used. Policies of selective interest rates, selective access to credit and multiple exchange rates have the effect of favouring supply over demand; that is to say, they reward investments in productive enterprises while penalizing speculative transactions. Such policies require careful planning and monitoring as well as strong measures to prevent manipulation for illicit individual gain.

(i) The Advantages

132. In most studies on interest rates in developing countries, what emerges is that irrespective of the nature of the economy, interest rates are generally perceived to perform the following basic functions, at least potentially:

- reward for accumulating financial assets and incentive for postponing current consumption; in this respect, interest rates play the role of helping to mobilize voluntary domestic savings;

- as a measure of the cost of capital to borrowers; as such, interest rates can be used to influence the level of demand for capital resources and as a rationing device for the efficient allocation of borrowed funds among alternative investments;

- when the rate of return on foreign financial assets and exchange rate expectations are brought into consideration, interest rates can play the role of influencing the allocation of national wealth between domestic and foreign financial assets;

- in an inflationary situation, interest rates are perceived as constituting a policy instrument that can, given certain expected rates of inflation, influence the allocation of the public’s wealth between financial assets denominated in national currency and inflation hedges denominated in real assets; in this specific situation, it is the real rate of interest that is considered relevant, assuming that inflation rate does not run into 3 digits.

133. From these four roles, it should be clear that for most developing countries, a purposive interest rate policy has a multiplicity of features, each of which may be relevant or dominant, given the phase of development and the peculiar issues that have to be addressed during that phase. For example, an interest rate policy may have to reconcile itself to the conflicting need to attain a certain level and pattern of investment as well as attract enough savings. It is from such possible conflicts of role that, in many cases, there have been difficulties in justifying the adoption of one interest rate policy or another, as is amply illustrated by the empirical evidence in the next section.

134. In summary, the following reasons for selective credit control (SCC) and differential interest rate policy (DIRP) have been advanced as valid for developing economies:

- pursuit of over-riding development objectives that necessitates assigning different credit priorities to different economic activities and groups of economic agents;

- the serious imperfections in the financial markets of developing countries;

- the thinness of the financial structures because of low incomes, limited degree of monetization of economies and the large size of the informal sector;
• dominance of a few financial institutions which can exercise monopolistic or oligopolistic control over levels of interest rates and the allocation of credit;
• need to offset other serious distortions in the economy (e.g. in investment patterns);
• worries about the possibility of interest rates causing cost-push inflation either through their direct impact on costs or through the indirect effect of expectations.

(ii) Possible Limitations of DIRP and SCC

135. The effect of the existence of fragmented capital and money markets in developing African countries in which interest rates vary from one sector to another because of factor immobility and lack of information is that some sectors of the economy may be able to borrow funds far below the rate of interest prevailing in other sectors where the productivity of capital is higher. In this case, the allocation of capital may be distorted and inefficient. The solution is to encourage funds into the organised money market and to extend the provision of financial institutions into sectors of the economy which lack them, namely the rural sector. In fact, as it was mentioned earlier, when the range of financial assets is narrow, saving tends to take the form of acquisition of physical assets. While in principle this should not mean that the level of saving is reduced below what it might otherwise be, in practice it depends on how sellers of physical assets dispose of the sale proceeds. If a portion of the proceeds is consumed, the saving of one person is offset by the dissaving of another and less resources are released for investment than if financial assets had been acquired by financial institutions through differential interest rates with an investment function. This is a major reason why the statistics on saving and investment in developing countries underestimate the saving and investment capacity of those countries.

136. There are some other limitations of selective credit control policies. They may divide sharply categorise the sectors of the economy and raise excessively the overall interest rate, if the increase in resources to “high priority” sectors reduces credit to the rest of the economy. If the banking system attempts to keep the same amount of credit to the “low priority” sector, it may create or aggravate inflationary pressures. It may also create parallel markets of credit or reduce the profitability of banking institutions in an undesired amount.

137. While a certain pattern of interest rates and credit allocation might appear beneficial for development purposes, the differential interest rate schemes must be used to remove distortions in the financial sector until the market forces are capable to work properly. Otherwise, a permanent operation of subsidized interest rate schemes may open a wide door to diversion of the preferred funds to speculative activities or encourages the economy’s loanable resources to be squandered on projects that are not viable, because the public servants may not be the best judges of commercial and development viability. The taxation of the provision of financial services to supplement normal budgetary resources for development represented by interest ceilings, reserve requirements and the inflation tax on currency must be within limits, otherwise it will impose a disproportionate burden on the financial sector and the users of its services and impede the ability of the financial system to contribute to economic development. Likewise, selective credit programs should be used in such a way they do not introduce distortions. The administrative or political direction of loans to particular borrowers or classes of borrowers who cannot service the credit should be avoided.

4.3 Design and Application of Differential Interest Rates Policy and Selective Credit Control:

(a) Lessons of Experience

138. Selective credit policies have been designed and implemented in a number of developing countries as instruments of policy to deal with the problem of allocation of scarce investment resources to priority areas, special population groups such as peasant farmers or small-scale industrialists, or to special regions within a country. In the same spirit of deliberate government policy in the financial sector, differential interest rates have been designed either for different categories of bank deposits to reflect differences in the time-preference of depositors and for different types of loans (by sector or investment activity) to different types of borrowers.
139. Of course, given the inevitable fact that the characteristics and objectives of different countries are not similar, there are often marked differences in the design and application of selective credit controls and differential interest rates. This section surveys the experiences in the different forms of design and implementation so as to throw light on the questions of efficacy of designs and feasibility of application.

140. In the recent past there has been a tendency in most developing countries, which adopted structural adjustment programmes, to pursue policies of restrained growth of credit on the basis of the need to limit the authorities' capacity to raise the demand for money by interventionist expansionary policies. However, the stance of many developing countries continues to be that of accepting the developmental need to influence economic agents, and to increase investment and its effectiveness through some form of selective credit control and differential interest rates.

141. As there is, during periods of adjustment, an effective ceiling on overall credit and/or a maximum lending rate which is below the level that would otherwise have prevailed in some sectors under the free operation of the financial market, the total amount of credit available is usually below the amount demanded under normal conditions. This means that some form of credit rationing is usually required in order to distribute the available credit among different sectors. The available evidence suggests that banks engage in such non-price credit rationing even in the absence of governmental regulations. Under these conditions, credit to certain sectors, which are perceived to be more risky, is usually curtailed substantially more than credit to sectors which are considered less risky. In other words, whenever overall credit is being constrained in one form or another by the monetary authorities, it is likely that certain sectors will be rationed out of the credit market. However, governments usually adopt specific policy measures to ensure that credit is channelled to the desired high priority areas and that the interest rate structure is in line with the desired policy goals.

142. It is well known that banks in all countries have different interest rates for deposits depending on their maturities. However, it is often not appreciated that many countries also have different interest rates for different types of loans depending on their priorities and development objectives. The interest rate structure in Nigeria has been revised frequently and in many instances a more flexible interest rate policy was adopted. This policy has taken into consideration the need for less costly credit to priority sectors. Thus, agriculture, industry and housing are usually given preferential interest rates, while relatively high interest rates are charged in other sectors. Kenya rates have been revised downwards or upwards on the basis of the economic environment. To illustrate the design and application of such differential interest rates or selective credit, four country cases are summarized below.

143. From the above table, it is easy enough to understand the degree of preference given to priority sectors as opposed to non-priority sectors. For instance in Kenya, the lending rate ranges from 12 per cent to 18 per cent with preferred sectors getting the lowest rates. In Bangladesh, the lending rates range from 12 per cent for agricultural production to 16 per cent for general loans; while in Nigeria agricultural production obtains 6-7 per cent against 9.5 per cent for residential housing.

144. In the design and application of credit policies, the use of the following major approaches have been attempted empirically in developing countries:

- Special Institutions
- Central Bank Regulatory Mechanisms
- Fund-Creation
- Involvement of the Informal Sector.

145. It should, of course, be noted that in many cases there are important overlaps in these four major categories. Indeed in many experiences, these categories have been applied interactively. However, for the sake of clarity, the experience of developing countries with the use of each of the above categories of DIRP and SCC is outlined hereafter.
Table 4.1
The Pattern of Differential Lending Rates in Selected Developing Countries (Percentages)

<table>
<thead>
<tr>
<th>A. Bangladesh (year end 1982)</th>
<th>Nominal Interest Rate (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural production</td>
<td>12.0</td>
</tr>
<tr>
<td>Industry</td>
<td>14.5</td>
</tr>
<tr>
<td>Specific industries in less developed areas</td>
<td>13.0</td>
</tr>
<tr>
<td>Export credit:</td>
<td></td>
</tr>
<tr>
<td>- traditional items</td>
<td>12.0</td>
</tr>
<tr>
<td>- non-traditional items</td>
<td>11.5</td>
</tr>
<tr>
<td>Loans for socio-economic objectives</td>
<td>13.0</td>
</tr>
<tr>
<td>Loans given in the Chittagong Hill Tracts</td>
<td>13.0</td>
</tr>
<tr>
<td>General loans</td>
<td>16.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Nigeria (year end 1984)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Minimum Rediscount Rate</td>
<td>10.00</td>
</tr>
<tr>
<td>(ii) Treasury Bill Issue Rate</td>
<td>8.50</td>
</tr>
<tr>
<td>(iii) Treasury Certificate (1 year)</td>
<td>9.00</td>
</tr>
<tr>
<td>(iv) Treasury Certificate (2 years)</td>
<td>9.50</td>
</tr>
<tr>
<td>(v) Federal Government Stock</td>
<td>10.5-12.50</td>
</tr>
<tr>
<td>(vi) 4-7 years maturity</td>
<td>10.50</td>
</tr>
<tr>
<td>9-14 years maturity</td>
<td>10.75</td>
</tr>
<tr>
<td>15-20 years maturity</td>
<td>11.50</td>
</tr>
<tr>
<td>21-25 years maturity</td>
<td>12.50</td>
</tr>
<tr>
<td>(vii) Deposit Rates (Commercial banks)</td>
<td></td>
</tr>
<tr>
<td>Savings Deposit</td>
<td>9.50</td>
</tr>
<tr>
<td>Time Deposit with 7 days notice</td>
<td>8.50</td>
</tr>
<tr>
<td>Time Deposits for one month</td>
<td>9.00</td>
</tr>
<tr>
<td>Time Deposits for 1-3 months</td>
<td>9.25</td>
</tr>
<tr>
<td>Time Deposits for 3-6 months</td>
<td>9.50</td>
</tr>
<tr>
<td>Time Deposits for over 12 months</td>
<td>10.00</td>
</tr>
<tr>
<td>(viii) Lending Rates</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>13.00</td>
</tr>
<tr>
<td>Agricultural Credit Guarantee Scheme</td>
<td>6.70</td>
</tr>
<tr>
<td>Residential Housing costing not more than N100,000</td>
<td>9.50</td>
</tr>
<tr>
<td>Agricultural Production</td>
<td>7.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Kenya (year end 1987)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Bank of Kenya</td>
<td></td>
</tr>
<tr>
<td>Discount Rate for Treasury Bills</td>
<td>12.99</td>
</tr>
<tr>
<td>Rediscounts and Advances C &amp; SFC AFC</td>
<td>11.25</td>
</tr>
<tr>
<td>Rediscounts and Advances Export Bills</td>
<td>11.50</td>
</tr>
<tr>
<td>Other Bills and Notes</td>
<td>12.50</td>
</tr>
<tr>
<td>Advances against Government Securities</td>
<td>12.00</td>
</tr>
<tr>
<td>Advances against Treasury Bills</td>
<td>12.00</td>
</tr>
<tr>
<td>Commercial Banks</td>
<td></td>
</tr>
<tr>
<td>Loans and Advances:</td>
<td></td>
</tr>
<tr>
<td>- minimum</td>
<td>free</td>
</tr>
<tr>
<td>- maximum</td>
<td>14.00</td>
</tr>
<tr>
<td>Other Financial Institutions</td>
<td></td>
</tr>
<tr>
<td>Higher Purchase Companies and</td>
<td></td>
</tr>
<tr>
<td>Merchant Banks</td>
<td>18.00</td>
</tr>
<tr>
<td>Building Societies Loans</td>
<td>14.50</td>
</tr>
<tr>
<td>Agricultural Finance Corporation</td>
<td></td>
</tr>
<tr>
<td>- Land Purchase loans</td>
<td>12.00</td>
</tr>
<tr>
<td>- Seasonal Crop loans</td>
<td>14.00</td>
</tr>
<tr>
<td>- Other loans</td>
<td>13.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Thailand (year end 1982)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans and overdrafts</td>
<td>19.0</td>
</tr>
<tr>
<td>Discount rates (rediscouted from the Bank of Thailand)</td>
<td></td>
</tr>
<tr>
<td>export bills</td>
<td>7.0</td>
</tr>
<tr>
<td>bills from industrial undertakings</td>
<td>7.0</td>
</tr>
<tr>
<td>bills from purchases of agricultural products</td>
<td>7.0</td>
</tr>
<tr>
<td>agricultural bills</td>
<td>10.0</td>
</tr>
</tbody>
</table>

146. In almost all African countries, special institutions have been established to specifically and selectively direct resources to “high-priority” areas. These institutions have often taken different forms but have generally included the following types:

- National development banks
- Ownership of or majority share in Commercial Banks, Pension Funds and Insurance Corporations
- National Finance Corporations
- Co-operative Banks
- Special Sectoral Credit Institutions (especially for agriculture, industry and housing).

147. The *modus operandi* of different institutions have tended to vary empirically according to the particular circumstances - temporal and spatial - of the country as well as the objectives being pursued. For example, in Chile, there was an innovative approach of tailoring the form of loans to the needs of the users such that some of the loans were given directly in the form of inputs like fertilizers and reproduction cattle. Other credit institutions also additionally acted as purchasers of the output of their debtors to ensure more stable incomes.

(ii) Central Bank Regulatory Designs

148. In terms of designing and implementing selective credit and differential interest rate policies in developing countries, Central Banks have the most natural and pivotal role. This is not only because the Central Bank usually has the role and powers to regulate the portfolio composition of financial intermediaries, but it has or can be empowered with an array of tools which it can use in a number of ways to ensure the desired direction of credit. Here we consider three of the main measures that Central Banks typically use for selective credit control.

Direct lending by the Central Bank

149. The use of the Central Bank to directly channel resources has usually accounted for a fairly large proportion of total lending by the banking system. In Africa in the 1980s, it accounted for more than 50 per cent in ten countries; between 40-50 per cent in three countries and between 25 and 40 per cent in two countries out of a sample of 19 countries.

Reserve or liquidity requirements

150. Many developing countries’ Central Banks use reserve or liquidity requirement to effect selective credit control, although different countries have different versions of the policy instrument. The most common form of the reserve requirement is a percentage (5 per cent in early 1980s) of total deposits of commercial banks. However, Mexico’s experiment with reserve requirement was quite unorthodox. In this case, commercial bank liabilities, without counting operations which the Central Bank could declare exempt, had to be kept as their assets according to the following elaborate structure: up to 50 per cent as deposits with the Central Bank which could utilize them in “high priority” sectors; up to 25 per cent in assets determined by the Central Bank according to its selective credit policy; 25 per cent in other assets defined by the banking law.

Specific Directives and/or Guidelines

151. This approach has been used, often extensively, in a number of African countries such as Nigeria, Kenya, Sudan, etc. It could apply both to the quantitative and qualitative directives of credit. Nigeria once used this tool extensively (especially guidelines) to exercise direct control over a large portion of the country’s financial resources and transactions. The tool can be applied in a number of ways and consequently has often required a lot of care in design and implementation. In some countries, credit ceilings or quotas are established for different institutions. To ensure compliance, violation can be penalized by increments in cash reserve requirements, or by illegibility to some types of Central Bank financing. In other versions, a bank or group of banks could establish a specific agreement to provide to certain enterprises with all credit according to set-out norms. Other variations have included the use of
guidelines to deny banks the possibility of financing certain types of activities which the authorities deem speculative and which divert funds from the country’s basic development objectives.

(iii) The Fund-Creation Approach

152. One approach in selective credit control which has been used widely in Latin American countries, but has been relatively neglected in Africa, is that of creating special funds to perform specific allocative credit functions. Of course, in a way this is closely related to the creation of special financing institutions and could, perhaps, most effectively be designed along with the establishment of special credit institutions.

153. What, however, needs to be stressed is that special funds have been created to break specific bottlenecks in certain sectors or regions. These funds have also been used to provide technical assistance, guarantees and other special facilities such as regional integration. The system of fiduciary funds allows an evaluation of projects, considering not only economic, but also their social and technical aspects. Furthermore, the funds can combine budgetary contributions with external and internal resources, and tailoring them to their financing conditions (amounts, interest rates, maturity of loans, etc.) to meet the needs of projects. In such cases the special funds can also provide technical assistance for the design and evaluation of projects to be financed. Fiduciary funds can be operated at differential interest rates which are determined by the Ministry of Finance and the Central Bank.

(iv) Involvement of the Informal Financial Sector

154. It is well documented that there is in Africa an important amount of financial resources that do not enter the formal financial market (banks, insurance houses, etc). Efforts should be made to tap these resources and direct them to special activities, then it needs to formulate specific policies directed at the informal financial sector. What is required in this regard is firstly to establish a fuller understanding of the informal money markets. Secondly, there is need to provide a legal framework for the operation of these markets. Thirdly, selective credit policies aiming specifically at the mobilization and channelling of the resources in the informal sector should be formulated with emphasis on community and popular participation approaches.

(b) Differential Interest Rate Policy and Selective Credit Control in the Context of AAF-SAP

(i) Objectives

155. It has been amply demonstrated that differential interest rates and selective credit control can be fruitfully applied for the legitimate purposes of bringing about development and transformation by facilitating policies to discriminate between speculative activities and high priority productive activities. While it is possible that the institutional pegging of interest rates to discriminate among various productive and nonproductive economic activities could generate interest rates below the level determined by the free interplay of supply and demand in the formal financial markets, this need not be the case all the time. Further, it has been demonstrated that even when interest rates in developing countries are below the market levels, they tend to be expansionary while those which are set at a higher level (market levels) tend to be contractionary.

156. In many developing countries, it has been observed that firms will tend to economize on the use of borrowing for working capital in situations of high nominal interest rates. An interest rate policy could be judged most successful if lower interest rates fixed for productive long-term projects are compensated by higher rates on short-term trading or speculative activities, such that the average rate of interest remains reasonable and realistic. In brief, it is plausible in the context of developing countries, particularly in Africa, to have interest rates on credits for productive investment at low levels in order to boost economic growth and development for example, through the creation and diversification of productive capacity.

157. It should also be recalled that while the maintenance of positive real interest rates is intended primarily to attract more savings, all available evidence points to the inconclusiveness of the relationship between interest rates and savings, at least in developing countries. This does not, of course, mean that
Africa should down-play the importance of interest rates in savings decisions, but rather that African countries should adequately assess the importance of other factors such as the level of income, rate of inflation and the degree of financial intermediation which also influence the level of savings, instead of hinging policy emphasis on positive real interest rates.

158. Further, given the problems of inflation and low investment, very high interest rates or inflation-adjusted nominal rates may be counter-productive by shifting resources to speculative and trading activities as against directly productive investments and by adding to the inflationary pressure in the economy. It is in this regard that attempts to achieve positive real interest rates could perhaps better concentrate on reducing the rate of inflation as against upward adjustments in the nominal interest rates to catch up with the inflation rate.

159. There is, however, the problem of how long it might take to bring down the rate of inflation to an acceptable level and what the interest rate structure should be in the intervening period. It is, indeed, during this transition period that a discriminatory interest rate regime with very high nominal rates set for speculative and low priority activities and lower rates for the high priority sectors, becomes relevant.

160. It should be recalled that the advocacy of differential interest rates in African countries is for selective nominal interest rates in such a way that the interest rates on loans for speculative activities would be higher than the rates on loans for productive activities, such that the resulting weighted real interest rates for savings would be positive. Noting that there is not one single interest rate, even in a capitalist economy, it is important to point out that there is nothing new about differential interest rate policy. The real issue would be on the objectives for and the extent to which the policy is applied. In the case of developing countries, the policy would be to bring about a process of deliberate transformation, while in the latter, the main purpose might be merely to control or direct consumption.

161. Thus, for developing countries aiming at transformation, differential interest rates can be applied with clearly defined specific and sharply focused objectives to which the policy is to be directed. Such objectives could include the following, depending on the circumstances of the country:

- ensuring food security and self-sufficiency through local food production;
- promotion of small-scale enterprises and cottage industries;
- keeping down the cost of servicing the public sector debt;
- generating economic development through reduction of speculative activities and shifting resources to productive activities;
- favouring disadvantaged groups or regions in a country;
- alleviating abnormal adjustment costs that financial and non-financial enterprises might face;
- the control of inflationary pressure that might result from high nominal interest rates.

(ii) Prerequisites for DIRP and SCC

162. But, in pursuing these objectives with the use of differential interest rates, due attention must be paid to the specific characteristics of the society and the economy, especially with respect to the following: saving habits; extent of monetization of the economy; sources of inflationary pressure; size of government borrowing and the use of borrowed funds; magnitude and role of foreign capital; degree of financial intermediation; importance of the informal sector; degree of inequalities in financial power between different categories of producers.

163. After taking these pertinent factors that affect the successful application of a differential interest rate policy, the government could choose a specific mechanism or combination of mechanisms for the implementation of DIRP and SCC. In choosing between the different mechanisms, it is essential to stress that due account should be given to the following:

- administrative mechanisms should be clear-cut with unambiguous goals and priorities;
- the simpler the mechanism the easier to implement and the more likely is its success;
- each mechanism should have a well defined time-frame for its application and/or review of its intended effects;
- the mechanism should be enforceable and, preferably, it should have built-in measures to ensure efficiency and compliance.

(iii) Financing of DIRP and SCC

164. Theoretically, when market forces operate freely and perfectly, increased demand for investment will raise the rate of interest and, other things being equal, this will induce additional savings to finance it. That is, the higher deposit rates will attract more savings in the banking system, while the high lending rates will reduce desired investment. On the other hand, when the interest rates are regulated — as proposed here — the available savings and consequently the credit expansion of the banking system can be rationed so as to finance increased and desired investment demand that generates increased economic development.

165. However, it is also possible and feasible to establish differential interest rates in such a way that no particular financing is required. This can be achieved by banks through the management of their lending portfolio in such a way that the interest rates on speculative activities and low priority activities more than compensate for the lower interest rates on priority sectors, such that it is more than probable that an average positive real interest rate for savings can be maintained.

166. More fundamentally, selective credit control must be seen and used as a basic development policy. Firstly, it is often the case that financial institutions (including banks) underestimate the credit worthiness and overestimate the risk, administration and collection costs associated with extending loans to certain sectors such as agriculture. These institutions could also lend to sectors or projects that have private costs which are higher than social costs. Indeed, many financial institutions do not take into consideration the external benefits which expansion in the “high priority” sectors generate for the rest of the economy. Secondly, the effective attraction of resources by the priority sectors can become severely constrained since in their productive activity, they may not show high rates of return. However, from an optimising point of view, the value created by the activities of such sectors can be significant enough to warrant the direct use of society’s resources in these activities. In such a context, there is ample justification for a tax or a subsidy, to bring about economic and social returns for the whole society with the positive externalities flowing from the “high priority” sectors.

167. In most African countries, interest rates of some specialized financial institutions, e.g. agricultural and industrial banks, have been highly subsidized by governments. Development banks which often offer low interest rates are mainly owned by the government or their capital has come mainly from equity contribution, grants and loans from the government. Hence, bank credit or government loans to priority sectors - agricultural and industrial can be extended mostly at very low interest rates. Where specialized agricultural or industrial credit institutions do not exist, the central banks have either to directly order the commercial banks to deliver credit to the sectors at preferential rates or to undertake the role and grant favourable rates on rediscounts of promissory notes arising from various activities.

(iv) Administrative Modalities

168. A differential interest rates policy can be applied in situations where the market mechanism may result in sub-optimal allocation of resources by encouraging speculative rather than productive activities. Therefore, the implementation strategy should involve, inter alia, the establishment of specialized institutions. But it is important at the practical administrative level to introduce in the activities of the existing commercial banks, development projects to be financed by the banks. Further the system of differential interest rates and/or selective credit control should not be too elaborate, as the fewer the differentials, the better. Some in-built mechanisms to ensure efficiency and compliance and the insulation of management from political manipulation in the case of specialized public financial institutions are also essential. Finally, the administration of interest rates by the Central Bank and Ministry of Finance should see to it that funds get to the most efficient users.
5. **Price Support Policies for Food Self-Sufficiency in Africa**

5.1 **Introduction**

169. Adequate and secure food supply is an essential pre-requisite for the achievement of stable and sustainable development. Lagging food supply can be a major constraint on employment generation and industrial input supply; it can fuel inflationary pressures and force unsustainable recourse to food imports. Hence the emphasis by African leaders on the need to enhance production capabilities for the attainment of higher levels of food self-sufficiency and to insulate the region from the political pressures that accompany excessive dependance on food aid.

170. It should be stressed that, although emphasis has been given by donor institutions to food security, as an objective which African countries should aim at, it is forgotten that this has often implied increasing food dependency through rising food import and food aid from outside the region, thus making it difficult to achieve food self-sufficiency at regional level. Even the comparative advantage argument does not answer the question because of two main reasons among others: sustained and deepening food dependency, terms of trade always detrimental to the exports of other crops. In addition, the argument totally ignores the high opportunity cost of food import the economy as a whole, and specifically to other sectors in which resources could have been more efficiently used. This is why, as far back as 1980, African countries in the Lagos Plan of Action and the Final Act of Lagos, food self-sufficiency as their strategic objective. Consequently, there is no doubt that any reliable and effective food security must be considered only within the framework of food self-sufficiency.

171. Fortunately, Africa is well endowed with the potential for achieving the goal of food self-sufficiency. With only 26 per cent of the arable land currently under cultivation, the region could feed a population three times bigger than its present one. In spite of this potential, however, per capita food production and the food self-sufficiency ratio in the region have been falling steadily since late 1960s (see Table 5.1 and figures 5.1 and 5.2). As a result, Africa moved from a net exporter of staple food in the early 1960s to a net importer of food in the 1970s and 1980s.

172. At the centre of Africa's intensifying food crisis is the low level of agricultural productivity, arising mainly from low agricultural investment, poor technology and inadequate incentives to farmers to increase their production and marketed supply of food. To turn around these deteriorating food situation, these areas of deficiency have to be urgently addressed. Admittedly, the transformation of the food sector is a long-term endeavour which requires, among other measures, improvements in the physical and institutional conditions and significant technological innovation. But, for these to succeed, adequate producer incentives are a necessary condition. Even with the present technology, the scope for raising agricultural production and setting in motion the process of technological transformation in the food sector is considerable, provided the right types of incentives are offered to farmers.

173. Over the past two decades, many countries implemented input subsidy programmes in a bid to foster technological diffusion in the food sector. Financial costs apart, the management of these schemes proved difficult and subject to abuse while the gains in agricultural productivity remained largely insignificant. At the same time issues relating to overcoming farmers' price and income uncertainties remained largely unaddressed.

174. To bring about a sharp departure from past trends in food production and achieve food greater self-sufficiency, effective price policies are needed to provide the necessary incentives to increase output in a sustained manner. This is why the adoption of Price Support Policy (PSP) and complementary selective credit policies are advocated for African countries. The proposed scheme, while overcoming the deficiencies of the subsidy programmes, provides direct incentives to the producers thereby giving them greater flexibility in the choice of least-cost combination of inputs. Also Price Support Policy could encourage the adoption of innovations and improved cultural practices by food producers.

175. In view of the above considerations, this Chapter first reviews the overall context of food self-sufficiency, particularly the various policy instruments and measures that could contribute to its attainment. Secondly, it assesses the validity of food price support policies and, thirdly, outlines the design and implementation mechanisms.
5.2 Food Self-Sufficiency in an Overall Context

(a) Issues and problems

176. Africa's main staples consist of cereals - notably maize, wheat, rice, sorghum, and millet - and roots and tubers such as cassava, yams and potatoes. While the dietary composition varies from one sub-region to the other, overall, cereals provide about 50.5 per cent, while roots and tubers account for 17.3 per cent of the total calories needed per day. For Africa as a whole, total net cereal production (after post-harvest losses of an average of 10 to 15 per cent) was estimated at 66.3 million tons in 1989 with maize, sorghum, rice, wheat and millet accounting for about 32.2 per cent, 17.5 per cent, 14.2 per cent, 14.5 per cent and 13.2 per cent, respectively. With respect to roots and tubers, total net production (after post harvest losses of an average of 20 to 25 per cent have been taken into account) amounted, in 1989, to about 84.1 million tons compared to an average of about 71.6 million tons during 1979/81.

177. The issue of food self-sufficiency in Africa should be viewed not only in terms of the quantum of production and its composition but most importantly also with respect to the trends in per capita food production, and the self-sufficiency ratios for individual commodities and groups of commodities that constitute the African diet. Total net cereal production increased by only about 2.17 per cent annually during the period 1961/63-1989. The average annual growth rate for roots and tubers during the same period was 2.4 per cent. During the same period, the average population growth rate was 3.0 per cent. As a result, per capita food production fell significantly, with the fall more pronounced in cereals. This contrasts sharply with experience in other parts of the world, particularly in Europe, North America and parts of Asia and Latin America where per capita production of food grains rose steadily.

178. It should be noted, however, that the food crisis in Africa mainly centres on cereals (see Table 5.1). In 1961/63, the average self-sufficiency ratio in cereals was 82 per cent against 83 per cent for roots and tubers, the latter being more seriously affected by waste. By 1989, the self-sufficiency ratio for cereals dropped sharply to 62 per cent, while that of roots and tubers remained generally stable except in 1989 when it declined steeply. Practically all subregions experienced significant declines in their cereals self-sufficiency ratios (see Table 5.2). These trends are however less pronounced but significant in the case of roots and tubers. The fall in the ratio for cereals, particularly during the 1980s was due, inter alia, to drought, desertification, low productivity and poor price incentives.

179. If current trends continue, the food situation in Africa by the year 2008 could be worse than at the height of the Great African Drought of the mid-1980s. Africa's dependence on food imports and food aid, which is already high, will be more critical. There is, therefore, need to devise policies aimed at raising production levels, re-orienting consumption habits by promoting the consumption of roots and tubers in areas with potential for producing them, and reducing pre- and post-harvest losses, particularly in roots and tubers. The control of pests and plant diseases as well as crop conservation are urgently needed for these crops. The International Institute for Tropical Agriculture (IITA) in Ibadan (Nigeria) has made a breakthrough in this field for cassava and other tubers and such efforts should be encouraged. Other findings by national and subregional research institutions in this regard should be supported and disseminated.

180. Since cereals are the main component of food imports in Africa, increasing their production should be the major objective of food self-sufficiency in the region. As is well known, the causes of the poor performance in cereal production in Africa include, insufficient investment resources, inadequate supply of modern inputs, backward technology, and inadequate support policies. Thus, strategies for increasing cereal production should fully take into account these deficiencies and endeavour to redress them urgently and consistently.

181. Investment in agriculture, and especially in food production, has not been given the attention and priority. Within agriculture, however, the food sub-sector tended to suffer a systematic neglect as investment and research have been concentrated primarily on the development of cash crops. As a result, and as revealed by a recent FAO study: African Agriculture: the next 25 years, only 30 per cent of Africa's

---

4 See Annex.
5 See Annex.
Table 5.1
Per capita Production of Cereals and Roots and Tubers and Self-Sufficiency Ratio (SSR) in Developing Africa - 1961/63 - 1989

<table>
<thead>
<tr>
<th>Years</th>
<th>Cereals Production in kg</th>
<th>SSR</th>
<th>Roots and Tubers Production in kg</th>
<th>SSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961/63</td>
<td>137</td>
<td>.82</td>
<td>162</td>
<td>.83</td>
</tr>
<tr>
<td>1969/71</td>
<td>136</td>
<td>.81</td>
<td>164</td>
<td>.82</td>
</tr>
<tr>
<td>1979/81</td>
<td>120</td>
<td>.66</td>
<td>158</td>
<td>.84</td>
</tr>
<tr>
<td>1983/84</td>
<td>110</td>
<td>.60</td>
<td>155</td>
<td>.83</td>
</tr>
<tr>
<td>1989</td>
<td>111</td>
<td>.62</td>
<td>141</td>
<td>.75</td>
</tr>
</tbody>
</table>

Source: Based on Annex.

Table 5.2
Self-Sufficiency Ratio of Cereals and Roots and Tubers by Subregion, 1961/63 to 1989

<table>
<thead>
<tr>
<th>Subregion</th>
<th>1961/63 C R&amp;T</th>
<th>1969/71 C R&amp;T</th>
<th>1979/81 C R&amp;T</th>
<th>1983/85 C R&amp;T</th>
<th>1989 C R&amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Africa</td>
<td>0.8</td>
<td>0.88</td>
<td>0.76</td>
<td>0.93</td>
<td>0.55</td>
</tr>
<tr>
<td>Central Africa</td>
<td>0.93</td>
<td>0.88</td>
<td>0.92</td>
<td>0.85</td>
<td>0.69</td>
</tr>
<tr>
<td>Eastern &amp; Southern Africa</td>
<td>1.09</td>
<td>1.09</td>
<td>0.91</td>
<td>0.88</td>
<td>0.79</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>0.81</td>
<td>0.82</td>
<td>0.77</td>
<td>0.82</td>
<td>0.73</td>
</tr>
<tr>
<td>West Africa</td>
<td>0.73</td>
<td>0.79</td>
<td>0.76</td>
<td>0.79</td>
<td>0.67</td>
</tr>
</tbody>
</table>


land area is presently capable of sustained production of rain-fed crops, while half of such potential is not utilized. On the other hand, 9.5 million ha are irrigated out of which only about 5 million ha in Africa south of Sahara (70 per cent of which are in Madagascar, Nigeria and Sudan). It should be noted that according to the same FAO study, there is sufficient water to irrigate more than 40 million hectares, although almost half of this is in areas with ample rainfall. Poor infrastructure, particularly roads, credit and marketing facilities have also made it difficult for farmers to have access to inputs and consumer goods, and to market their crops. Increased investment in agriculture, particularly in irrigation, is now urgently needed if food production, especially cereals, is to be increased.

Development of agricultural research is, no doubt, another necessary means of improving productivity and increasing production in the food sub-sector in general, and for cereals in particular. Overall, as shown by the same FAO study, agricultural research programmes in Africa have not been specifically targeted to small-scale and traditional farming systems characterized by wide ranges of crops, limited use of modern inputs and concentration on subsistence production. In view of this, it is important to evolve a research-based strategy for increasing food production, especially cereals, by small-scale farmers who constitute, at least in the short- to the medium-term the major source of food supply. Pioneering efforts in this regard such as those of IITA should be encouraged.

While investment and research are important building blocks for the food self-sufficiency strategy, it should however be stressed that these measures would need to be supplemented with effective incentive scheme that ensures income stability and induce the use of improved farm inputs and techniques of production.
5.3 Assessment of the Validity of Price Support Policies for Food Self-Sufficiency in the African Context

(a) Some General Considerations

184. It is well-known that, under certain social and economic conditions, it is legitimate or even necessary to apply some forms of price support policies. This is the case, of the general form, when government interventions in the agricultural sector are said to be justified if existing output and input markets are not functioning optimally due to a variety of domestic and/or external circumstances.

185. In such situations, it is often the case that a number of imperfections in the different markets create distortions that make market prices of output and inputs not to adequately reflect social costs and benefits. For example, evidence has been adduced to the effect that in some countries at certain stages of development, existing output prices and, consequently, output levels may be suboptimal. Similarly, the application of modern agricultural inputs at existing prices may be below optimal levels. As a result, in such situations, government interventions with policies such as input subsidies and output price support can help to mitigate the sub-optimality of input application and/or the under-valuation of the farmers’ output.

186. Another general consideration that enters the calculations of policy makers in the application of price support policies in the food sub-sector is that it provides employment and income to a large proportion of the population. In the case of food production, the concerns that may socially justify the direct intervention of government in the output market (as output price support) or in the input market (as subsidies to production inputs) may vary from country to country or from period to period. However, these will generally include one or more of the following: increased production to ensure food self-sufficiency; creation of incentives for the adoption by farmers of new food varieties; ensuring the modernization of the food sector in terms of improved inputs (seeds, fertilizers, technology etc.); protection of food farmers from excessive income instability; and insuring that food supply levels are not unduly affected by external factors.
187. The need to provide farmers with a certain minimum income usually has inherent appeal from the economic and social points of view. Economically, farmers' income can generate the desired effective demand which, in turn, drives the economy to higher rates of growth. Secondly, farmers' surplus is often an important source of investment. Thirdly, the more assured the income of the rural population the easier it is to grapple with the social issues of health, education and nutrition.

188. A final general consideration that must be taken into account in assessing the validity of production price support policies is that of the possible conflicts that could arise among the different objectives and among the effects of the different intervention measures on food production. Since in the present analysis we are primarily concerned with food price support policies, it is pertinent to stress that both producer price support and subsidies on farm inputs need not be used exclusively as the latter has a role to play in increasing food production.

(b) The Case of Price Support Policies for Food Self-Sufficiency in Africa

189. The analysis in Section 5.1 amply demonstrates the critical food situation that prevails in the African region. The same analysis clearly points to the necessity and urgency for African countries, individually and collectively at subregional and regional levels to undertake purposeful measures to ensure the attainment of food self-sufficiency in the African region. It is against this irrefutable background that the discussion below focuses on those basic and unique reasons that validate the adoption of price support measures for food self-sufficiency in African countries. The reasons are treated under four broad categories namely: (i) price stabilization, (ii) sustained growth in food production, (iii) transformation strategy, (iv) advantages of price support policy.

(i) Price Stability

190. While price stability is a basic objective of agricultural policy in any country, it is particularly crucial with respect to food in the African context. Firstly, the African region, more than any other region, suffers from a very high degree and frequency of variations in climatic conditions with periods of drought being followed by periods of good rains. Secondly, food production in Africa is highly dependent on weather due mainly to the low level of technological internalization and the relatively low share of irrigated agriculture in total agriculture. Thirdly, the high rates of post-harvest food losses compounded by poor storage, transport and marketing systems imply that a small degree of seasonal variation in food output could result in a disproportionately high variation in prices.

191. One disastrous consequence of high price instability as a result of the above factors in Africa has been the induced spiral fluctuations or even decline in output. For example, when a bumper harvest as a result of good weather follows a lean period, prices get depressed and this, in turn, induces farmers to reduce the output in the subsequent season. This induced volatility in output reinforces the fluctuations in prices and further undermines the long-term growth trend in food production.

192. There are also other important aspects that underlie the logic for price support policies for food self-sufficiency in Africa. One such aspect relates to the importance of maintaining a certain degree of predictability in real incomes of food growers. This is not only because real income variability may lead to adverse food production decisions, but also because macro-economic planning and management can be rendered very difficult by unpredictability in food prices for both producers and consumers. Overall, greater stability in producer prices reinforces production growth by minimizing risk and uncertainty. It also facilitates a greater and more consistent use of farm inputs and thereby leads to higher productivity.

(ii) Sustaining growth in food production

193. It is well-known that at the core of the continued poor performance of African agriculture in general and food production in particular is the pervasive low agricultural productivity in African countries. This is in turn a direct result of, at least, two basic phenomena; namely, lack of technological change (improved seed varieties, higher application of inputs such as fertilizers and pesticides, increased irrigation, improved farm tools and implements); and, low levels of investment in agriculture. To mitigate these two very crucial aspects of the problem of agricultural productivity in Africa, it becomes almost inevitable for governments to adopt such policies as will induce a momentum for technological change and also increase the investment rates. Such policies are naturally of a price support nature.
or low profitability schemes that are nevertheless essential such as multi-purpose water conservation and irrigation or storage centers, and, it does not involve increases in food prices, especially for politically volatile urban consumers, price support is still preferred and should be strongly recommended in the African context for several reasons:

- price support can be more easily targeted to specific food crops and for changing crop mix than input subsidy;
- the diversion of some subsidized inputs for speculative sale would adversely affect the targeted production. This is not the case with price support;
- price bias against food production and differentials in the prices of domestic and imported food that have been major sources of the decline of agricultural food production in Africa can be more easily eliminated or reduced through price support;
- production plan is also more sensitive to a fall in output price than to an increase in input subsidy, especially when the input cost is a small proportion of total production cost;
- the supply response to price support is more measurable and, therefore, more predictable than to input subsidy;
- the financing of price support schemes is usually easier and less burdensome on government resources, especially when pan-territorial pricing is not used, since it could be financed through the management of buffer stocks or the levying of import duties on the imported food commodities (if the self-sufficiency ratio in these commodities is less than 1);
- price support, especially guaranteed prices, is also more effective against adverse weather changes than input subsidy within a given crop cycle (i.e., excluding irrigation subsidy);
- the implementation of price support tends to be easier than the operation of an input subsidy, with given problems of procurement and storage for both policies;
- price support provides a direct form of incentive and leaves total flexibility to the producer to choose the least-cost combination of inputs (new and traditional) to raise production. It also subsidizes the use of land and farm labour that are major farm costs.
- on equity grounds, the welfare impact of price support on both the poor and small producers tends to be greater than that of input subsidy. This is because price support is more tied to producers’ income and they are more sensitive to them in developing countries; it also ensures more stable commodity prices.

201. The advantages should be seen against some shortcomings including the difficulty in adopting new technology which is better achieved through input subsidy; poor targeting of intended beneficiaries, difficulties in setting appropriate price support level; and poor marketing of transportation. However, these advantages far outweigh the above shortcomings. Indeed these are the challenges that require careful and effective administrative machinery in the design, implementation and monitoring of price support policies in Africa.

(c) The Empirical Basis for the Application of PSP

202. Thus far, the analysis of the validity of food price support policies has focused on theoretical considerations. It is, however, noteworthy that perhaps the most cogent basis for the advocacy of price support policies is the compelling empirical evidence that spans both developed and developing countries, especially in the area of increasing food production. In addition to the theoretical basis for price support policies, the success stories of countries (including those in Europe, North America and Asia) that have applied such policies and achieved tangible results in food self-sufficiency would constitute ample justification for their use in the African context.

203. In the developed market economies price support policies have been used, at one time or other, by almost all countries, albeit to achieve different objectives ranging from the stabilization of farmers’ incomes to the provision of minimum income support to specific income targets relative to those in other
194. Price support policies for well selected food commodities generate enough remuneration and incentives to food producers to enable them adopt new production techniques and thereby sustain increased food production. Indeed, guaranteed stable producer prices have, in the long-run, the surest possibilities of maintaining the momentum of technological change in the food sub-sector. In this respect a study on agricultural income support in OECD countries notes, in no equivocal terms, that “an assured level of remunerative prices for unlimited quantities will lead to increased production of the more profitable products. Increased production almost inevitably results from a greater use of capital inputs which may have been diverted from other enterprises within agriculture or from outside the industry”  

195. Further, in respect of boosting food production growth through increased investment, producer price support policies could have the much needed effect. Indeed many studies (even of agriculture in developed countries) have come to conclusions that are highly supportive of the hypothesis that income or price support measures taken by government raise agricultural profitability and stimulate capital investment in the sector. The same OECD study also reached the conclusion that in OECD countries “several of these measures may have encouraged investment in farming enterprises which would not be justified on the basis of economic criteria alone but are often considered necessary (by certain countries at least) for strategic, regional, environmental or socio-economic reasons”.

(iii) Transformation Strategy

196. In a development context when policy makers cannot afford to be concerned solely with the alleged efficacy of market forces, there are valid grounds for government interventions in the food sub-sector. One of these grounds in the African context is that of transforming the agriculture sub-sector as a whole with a view to achieving a better balance between food and export crops production. In this particular situation, price support policies can play a vital role. Of course, input subsidies would, in this case, be difficult to use as there would be no sure way to ascertain that the subsidized inputs go to food rather than to export crops production.

197. It is not difficult to demonstrate that if prices of food crops were maintained at a minimum guaranteed level while export crops were left to the vagaries of the international market for primary commodities, farmers might shift resources to the food crops sub-sector. Naturally, the relative remuneration of the prices of the two types of agricultural crops has an important role to play in the success of such support policies to bring about agricultural structural change. But this is more a problem of the efficacy of the design of the price support policy, rather than of the principle. Indeed export earnings may also be important in the financing of price support mechanism for food production.

198. While the need for such transformation might be unclear in the face of the acute shortage of foreign exchange and the premiums that are associated with such scarcity (hence the usual short-run myopic prescriptions to devalue so as to raise the producer prices of export crops), adequate attention must be paid to the strategic importance of food security and its implications on foreign exchange savings, especially in the medium-and long-term.

199. Finally, it should be pointed out that price support policies may have other economy-wide effects of re-structuring. For example, support of food production may stimulate food processing industries and lead to a much more value-added content in output than the export of raw agriculture crops such as coffee, cocoa, cotton etc. Indeed, such restructuring may lead to new export patterns that are less vulnerable to the structural decline in world demand and world prices such as the one affecting traditional agricultural export crops. This would, possibly, be additional to the advantages that would accrue from a better linkage and articulation between agriculture and domestic industries as well as the internalization of the basic forces of demand and supply.

(iv) Advantages of Price Support Policies

200. The long debate over the relative effectiveness of price support and input subsidy is becoming something of the past, because of its successful applications by many developed as well as developing countries. Though input subsidy is favoured in some circumstances because: its beneficiaries are farmers, it can help correct a distorted pattern of relative input prices, it can ensure the establishment of large scale
occupational groups. Some of the OECD countries have even had systems of comprehensive income support requiring extensive government interventions.

204. The extent of food price support in some developed countries in the recent past is summarized in the Table 5.3. It is clear from the table that for a number of reasons, developed countries have had to maintain fairly high levels of agricultural price support. What is not indicated in the table, but needs emphasis, is the fact that through the persistent use of these agricultural price support policies since the 1950s, the OECD countries that were not self-sufficient in food attained food self-sufficiency with considerable subsequent surpluses.

205. There are also numerous cases of developing countries that have used agricultural price support policies successfully to transform their agriculture. Among the documented successes are countries like South Korea, Thailand and India in Asia; Venezuela, Argentina and Brazil in Latin America; as well as Zimbabwe, Kenya and Malawi in Africa. The latter three African countries have achieved self-sufficiency in staple food items, partly through the use of price support systems which entailed fixing producer prices seasonally. Therefore, the argument that price support is sustainable only in developed countries does not hold.

<table>
<thead>
<tr>
<th>Table 5.3</th>
<th>Levels of farm Support in OECD Countries (in billion dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1986</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td></td>
</tr>
<tr>
<td>Net total value</td>
<td>1.37</td>
</tr>
<tr>
<td>Per cent</td>
<td>10.00</td>
</tr>
<tr>
<td><strong>EC</strong></td>
<td></td>
</tr>
<tr>
<td>Net total value</td>
<td>62.41</td>
</tr>
<tr>
<td>Per cent</td>
<td>50.00</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td></td>
</tr>
<tr>
<td>Net total value</td>
<td>34.12</td>
</tr>
<tr>
<td>Per cent</td>
<td>75.00</td>
</tr>
<tr>
<td><strong>US</strong></td>
<td></td>
</tr>
<tr>
<td>Net total value</td>
<td>44.68</td>
</tr>
<tr>
<td>Per cent</td>
<td>42.00</td>
</tr>
<tr>
<td><strong>OECD Average</strong></td>
<td></td>
</tr>
<tr>
<td>Net total value</td>
<td>163.21</td>
</tr>
<tr>
<td>Per cent</td>
<td>51.00</td>
</tr>
</tbody>
</table>

Source: OECD, March 1990.

Notes:
1/ Calculated in terms of producer subsidy equivalent (PSE) - the value of transfers to the farmer from the taxpayer and consumer.
2/ Estimates
3/ Projections

5.4 Design and Application of PSP for Food Self-Sufficiency

(a) Lessons of Experience

206. There are extensive experiences with the use of price support policies in developed and developing countries which offer useful lessons and practical guidance for the operational design and implementation of these policies. In Africa, Asia and Latin America, price support policies have been used with varying degrees of success to achieve such diverse objectives as food self-sufficiency, increased production of selected crops, producer price stability and distributional equity. These are in addition to
the OECD’s application of these policies, such as the EEC’s Common Agricultural Policy (CAP), the United States agricultural support programme and others in the developed countries.

207. The design and application of these policies in African countries have sometimes been supplemented with input subsidies. These input subsidies, especially on fertilizer, have for example, amounted to 100 per cent on cotton and irrigated rice fertilizer in Cote d’Ivoire, 100 per cent on phosphate rock in Senegal, 63 per cent on fertilizer in Gambia, 75 per cent in Nigeria, 53 per cent in Sierra Leone, 90 per cent in Guinea and around 75 per cent on the cost of irrigation water in Burkina Faso. Kenya, Malawi and Zimbabwe concentrated their policies on price support mechanisms, producer and retail price control, regional price differentials, pan-territorial pricing and two price schemes together with agricultural marketing. While the subsidies were usually granted for specific current inputs like fertilizer, machinery and irrigation water, or for selected commodities like maize and tobacco in Zambia after 1982, the price support measures were usually for selected major crops, operated through marketing agencies, fixed annually and adjusted to the rate of inflation. While most of the input subsidies failed in these African countries, the combined production subsidies and price support policies succeeded fully in Zimbabwe in the 1970s and 1980s, and partially in Zambia with self-sufficiency in basic agricultural foods by the mid-1980s.

208. In Asia, Indonesia, South Korea, Thailand and India designed and applied price support policies very successfully, while Bangladesh achieved increased food production but suffered food shortage and efficiency losses. These countries also combined price support like domestic price stabilization, purchase and released prices and price control, with input subsidy on fertilizer. Indonesia extensively used producer price stabilization with minimum and maximum urban prices of rice, although it relied mostly on fertilizer and rice subsidies to achieve rice self-sufficiency during 1969/86 with “...the biggest increase (in fertilizer use) in the world”. South Korea combined purchase and release prices that exceeded wholesale prices with fertilizer subsidy to increase rice yield by 50 per cent during 1970/78 and raised producer price by 500 per cent while the consumer price index rose by only 300 per cent. Thailand used rice reserve requirement and rice export premium or tax with fertilizer subsidy from 1960 through 1973 to remain a net rice exporter.

209. India used guaranteed minimum price for food grains along with subsidies on fertilizer, irrigation and credit. The food grain subsidy bridges the gap between the producer price to farmers that is announced before planting and the lower consumer price for the poor as well as the grain distribution cost to government. In Peru, price support policy was used to achieve self-sufficiency in potato production. Argentina, Brazil and Venezuela also successfully used price support measures in their policies for food self-sufficiency.

210. From the empirical evidence, input subsidies, failed in most African countries and Bangladesh because their costs tended to become unmanageable, particularly marketing and food subsidy costs. These weighed too heavily on government budgets and rendered them inefficient. Moreover, subsidized inputs like fertilizer were often diverted and sold rather than used in the production process; their price bias against agriculture was usually excessive; the timing of their incentives was often faulty for production decisions; they were not sufficiently complemented with other appropriate measures such as extension service, agricultural infrastructure, credit, storage, etc. They were often not targeted and without time limit for their application.

211. By contrast, the empirical cases of successful design and implementation of price support policies in Zimbabwe, Venezuela and the Asian countries typically involved an appropriate mix with input subsidies at moderate costs. Their producer prices tended to be fairly close to parity or market clearing prices with their nominal prices adjusted to the level of inflation, and there was effective use of coordinated application of complementary measures. The institutional arrangements were also effective, consultative and durable.

(b) PSP Package

212. As in AAF-SAP, a general policy package for food price support has to be flexible enough to be adaptable to the special circumstances of individual African countries. This is to ensure that as with AAF-SAP policy instruments in general, the price support package can also constitute a menu from which
different countries can design their own support policies to reflect their concrete conditions. This involves the identification of the basic objectives and approaches to PSP as outlined below.

(i) Objectives

213. The main objectives of price support policy in African countries are:

- achievement of regional food self-sufficiency, especially in staple cereals like rice, wheat, maize, sorghum and millet that account for more than 90 per cent of Africa's cereals consumption requirements;
- to ensure remunerative producer prices as incentives for increased food production to eliminate instability in food price;
- to eliminate seasonal food shortages and restrain the associated price instability;
- to ensure equitable access to food, especially by the poor.

214. In these ways, the food price support package will simultaneously eliminate Africa's chronic food shortage, promote long-run transformation and satisfy basic welfare requirements. It is because these goals are so fundamental to national development that the developed countries and many developing countries rightly persist with the operation of food price support policies.

(ii) Approaches to PSP

215. Food production support policies may be commodity oriented, cost reducing, fiscal transfer measures or a combination of them. They are applied to major food crops, mainly for price and income stabilization as well as for food marketing. The common examples are:

- **market price support** at pre-determined levels above world market prices so that consumers bear most of it, or guarantee to producers of relatively low floor prices offering only minimum support with consumers paying higher market prices;
- **price supplements** to stimulate production by small-holders with payments linked to output and affecting production decisions;
- **two-price schemes** separating domestic and export markets by using a marketing agency that fixes minimum and maximum prices in order to protect producers (and consumers) from large price fluctuations;
- **stabilization schemes** (seasonal or over years) for producer prices to even out farm incomes over given periods, and offering stability to assure the continuity of production in an agricultural sub-sector (e.g. cereals), against short-run weather disturbances (e.g. drought) that cause severe output variations, fluctuations in costs and prices, and/or in world demand. In periods of less-than-average income, producers are paid from the stabilization fund to raise incomes to agreed minimum level with the payments proportional among growers (e.g. to growers' average contributions to the fund over say past three years so that the scheme is funded by growers);
- **intervention buying and selling** of agricultural commodities to prevent prices falling or rising beyond guaranteed levels so that the intervention prices are lower than guaranteed producer prices — the excess commodities bought are stored or exported (e.g. United States has three-year grain reserve);
- **border measures** offering preference to domestic producers over foreign competitors or used for the disposal of domestic excess supply of commodities on the international market. Examples of these border measures are import restrictions, export promotion, deficiency payment on export sales, price pooling between domestic and export markets, and cheap export credit.

216. The most common examples of these food price support policies that have been used successfully in developing countries are market price support, two-price and stabilization schemes, intervention buying and selling by marketing boards or agencies and border measures. They are fairly simple to
design, of limited budget cost, flexible enough to allow for the operation of market forces and minimize price distortions, while offering effective incentives that have increased food production in several countries.

(c) Operational Modalities

217. But, while the case for aiming at price stability for food through price support policies is strong, at least in the context of Africa's contemporary reality, the following some basic issues are important in the design and operationalization of a PSP package:

- the purpose for food price stabilization (whether for producers and/or consumers);
- the choice of the food commodities whose prices are to be stabilized;
- the choice of the most cost effective way of food price stabilization;
- the duration of the policies of price support to ensure price stability;
- the criteria (reflecting economic, political and social considerations) to be used in setting price levels of selected food commodities.

218. The realization of the many advantages and potential of food price support policies in African countries requires the satisfaction of some basic pre-requisites. These are so critical throughout the stages of policy design, operationalisation and monitoring that they deserve careful identification. Thus as in other policy situations, effective administrative machinery is essential for the successful application of food price support. This involves trained staff, accurate information on crop production and market situation, assured funds and adequate infrastructure for transportation, marketing and logistics. Capacity for serious economic analysis of micro and macro links and possible effects of price support is also essential. The Ministry of Agriculture should be the focal point for developing this administrative machinery. A reliable marketing network is equally important in order to facilitate procurement, storage and commodity sale.

219. It is equally necessary to emphasize again that though price support is fundamental, it is insufficient for achieving food self-sufficiency, and should be complemented with other measures. These should include input subsidies, public investment in infrastructure (storage irrigation feeder roads etc.), and macro policies such as appropriate exchange rate and the control of inflation.

220. The operation of the price support mechanism call for careful targeting and sound economic criteria. The relevant targets for African countries are major cereals, the supply levels required to achieve regional self-sufficiency and the specific producers, both large and small, involved. Among the relevant economic criteria are the costs and benefits, relevant comparative advantages and disadvantages and trade-offs, e.g., between price support and agricultural taxation, import duties and export sales rebates, etc. The anticipated supply response should also be desagregated into: (i) aggregate agricultural food output or the elasticity of aggregate agricultural food supply; (ii) commodity composition of total agricultural food output, especially the cereals component; and (iii) the marketed surplus from total output, which is what will be available as food supply to consumers, raw materials for domestic use and excess output for storage or export.

221. These considerations should point to the need for balancing the complexity and scope of price support with available funds and administrative capacity. The cases of successful application of price support typically involved limited budget cost and price coverage with periodic review in order to adjust to changing fiscal, demand and supply trends.

222. Finally, success in the use of price support in countries like Zimbabwe, Kenya and Malawi underscores the importance of consultation with the producers of the crops involved. Farmers' unions or associations should be widely and regularly consulted, and prices should be announced before planting or pre-harvest. Whichever method is adopted to suit the peculiarity of individual countries, the farmers should participate actively in the programme at all levels and with full and timely information.

223. The actual administrative modalities for the implementation of agricultural production support policies should focus mainly on price support as the generalized form of productive subsidy or incentive
package. The food price policy should provide the overall frame within which individual policy measures and marketing agencies operate. Hence the specific modalities for the application of the production support package should involve:

(i) Institutional machinery — this should consist of public and private organs with three basic units, namely, Ministry of Agriculture, marketing mechanism and farmers' unions or associations. The Ministry of Agriculture should be at the centre of any price support policy both in its conceptualization and implementation. It should coordinate the overall agricultural support programme, including general price support. Its task could be facilitated if, like in Malawi, there is an inter-ministerial price policy advisory committee that works closely with it. The marketing mechanism is the core of price policy as governments implement price support through it. This marketing organ can consist of a parastatal (e.g. marketing board), cooperative marketing bodies and private buyers and sellers to allow for a significant role for free market forces. These marketing bodies should enjoy basic autonomy and perform a price stabilization role through the provision of marketing margins within and between countries. The farmers' associations should offer extensive consultation on prices, other incentives, distribution networks and collection of information.

(ii) Target, coverage and output level — the target of the price support policy should include both large and small farmers with the crop coverage limited to major cereals like rice, maize, sorghum, millet and wheat. The basic objective is to achieve regional self-sufficiency in these cereals, but the commodity quantities to which price support should apply should be limited to available administrative capacity and funds. It is better to start with one or two of these crops depending of the situation in each country.

(iii) Major pricing policies — these should be primarily:

- **Minimum or floor prices** for selected commodities (staple cereals) below which the market prices should not be allowed to fall. When prices tend to fall below the floor, the marketing agency should buy excess quantities for reserve in order to raise the price to remunerative level;
- **Seasonal price stabilization** or seasonal pricing to smooth crop prices to stable levels within and between seasons through purchase at harvest and release of supplies from buffer stocks during scarcity periods. This is the standard function of the marketing board system whose marketing margins generate accumulated funds for price and income stabilization;
- **Regional pricing** is also necessary in order to enforce domestic price support by incorporating price differentials within a region or sub-region that arise from differences in production costs, productivity, transport costs and related factors. This regional pricing is useful for controlling smuggling across borders and promoting the regional harmonization of agricultural pricing. It can also be used through two-price schemes (domestic and foreign) for protecting domestic crop production against foreign food dumping.

(iv) Price level determination — the determination of the actual level of support prices, like the stability of the prices, is a major determinant of the impact of price support on food production. The typical approach is to set the support prices within a range of annual changes in real producer prices, as well as a range for consumer prices. These ranges or bands are for the producer prices of major crops whose yearly fluctuations are kept within a pre-determined range, and for pre-determined maximum rise in the consumer prices of basic foods in real terms per annum.

(v) Macro linkages of price support — the direct and indirect repercussions of changes in food and agricultural prices throughout the economy should be analyzed. The links between the agricultural sector and the national economy should be identified in policy design in order to avoid inter-sectoral price distortions and other economic disparities. Relative price bias against agriculture should thus be eliminated with respect to exchange rate, taxation, industrial promotion and public investment.

(vi) Periodic monitoring of agricultural support policies — periodic check of the consistency and impact of various measures, in agricultural and non-agricultural sectors, on input and output prices is essential. This involves the consideration of relative, rather than absolute prices, modifying existing prices relative to supply and demand conditions, and analyzing the effects of input subsidy on under utilized modern inputs with respect to economic efficiency and technological innovation. These should also include adequate financial provision for the price support programme.
(d) Financing of PSP

224. The successful implementation of any price support policy package depends critically on its effective funding and the ability to minimize the fiscal transfer element that might be involved explicitly or implicitly in price support programmes. In order to facilitate their successful funding, the financial implications of price support policies should be analyzed in advance in order to ensure, among others, that the expected increase in rural income derived from the application of price support, is translated to a large extent into effective demand for other sectors of the economy; the coverage or scope of the policies should be limited; expensive pan-territorial pricing should be avoided.

225. The establishment of buffer stocks is an essential requirement in the successful implementation of PSP. Even without the implementation of PSP, however, the need to maintain buffer stocks and adequate storage facilities for food has increasingly been recognized in African countries. In this respect, many countries in East Africa have established buffer stocks capable of lasting for six months or more following periods of crop failures or lean harvests, although none of these countries have before now tied this to the application of PSP. Obviously, in countries which already have some buffer stocks, the introduction of PSP will involve no initial capital outlays or impose little or no additional costs. It is in countries without existing buffer stocks that the financing requirements of PSP will involve new capital outlays in order to start the scheme.

226. In order to facilitate the successful funding of PSP, the financial implications of the introduction of such policies will have to be analyzed well in advance, and every care taken to ensure that the policies are limited in coverage, while at the same time expensive pan-territorial pricing is avoided. The actual funding of PSP can thus be on two accounts:

(i) **Use of self-financing market mechanism** — the allowance of significant role for market forces in the operation of price support can make much of it self-financing or even profitable. Thus self-financing cooperatives and private distributors can be allowed to implement the price support for some food crops or in some areas. Public marketing agencies or parastatals can also be commercialized to operate at least on cost-recovery basis.

(ii) **Revenue from buffer stocks** — this accrues by setting minimum or floor prices at levels that are close to domestic market prices and gaining the differential between maximum or actual market prices and the minimum price support. This requires efficient management of food reserves through cost-effective marketing with adequate transportation, storage and distribution channels.
PART THREE: General Conclusions

6. Implementation Strategies and Monitoring

6.1 Introduction

227. The preceding chapters have been devoted to detailed discussion of MERS, DIRP with SCC and PSP, focusing on their theoretical basis, empirical evidence and experience in their design and application in relation to the African economies. Their incorporation in policy packages for the operationalization of AAF-SAP have also been discussed. In this chapter attention will be focused mainly on the following: the complementarities and trade-offs among policy instruments; the preparatory country studies on the basis of which appropriate policies applicable to the unique socio-economic situations in specific African countries are to be determined; the implementation approaches; and monitoring of the Implementation of the policies.

228. As emphasised in AAF-SAP there is need for each country to design its own policy package that will appropriately address its unique economic and social problems. In this connection, there are a number of actions to be taken by national policy makers. The first is a thorough analysis of the economic and social problems in each country in order to establish the appropriateness of policies included in the policy package, preferably drawing from the recommended policies listed in Table 5.2 of AAF-SAP. While the three policies discussed in this document are crucial to the process of adjustment and transformation in African countries there can be little doubt that they need to be applied with other policy instruments in appropriately designed policy packages. It is necessary therefore that each policy package should be designed taking cognisance of complementarities and trade-offs among policies. A coordinated and harmonized application of policies that concretely identify these complementarities and trade-offs is thus a requirement of the design of sound policy packages. Sound implementation modalities and monitoring mechanisms for the implementation of policies also need to be formulated and made operational.

6.2 Complementarities and Trade-offs

229. In line with the holistic approach of AAF-SAP, national policy package must be designed in such a manner as to emphasize and capture the inter-relationships among economic variables, actors and institutions. "It is expected also in AAF-SAP that policy instruments and measures adopted by individual African countries are well co-ordinated among themselves so that they can achieve desired effects." 7

230. By way of examples, some of the important complementarities among MERS, DIRP with SCC and PSP and other policies can be highlighted in this section. While PSP is recommended for the achievement of regional food self-sufficiency, it can be complemented with a number of other policies. For instance, DIRP and SCC can support PSP in achieving the food self-sufficiency goal through the extension of credit to food growers at lower interest rates. One of the problems faced by farmers is access to credit, especially on concessionary terms. The use of DIRP and SCC provides a possible solution to this problem that has generally constrained food production.

231. Furthermore, PSP can be reinforced by MERS through the provision of a more favourable exchange rate for importation of farm inputs. As stressed in Chapter 5, backward technology, including inadequate application of inputs such as fertilizers and pesticides, are principal causes of low food productivity. MERS can thus be used to promote increased supply of these items by providing a lower exchange rate for their importation. To achieve the maximum benefits, these policies have to be

7 AAF-SAP
appropriately co-ordinated and supported by other measures such as improving agricultural marketing and input delivery systems, and the initiation of trade policies to promote local food production and discriminate against food imports.

232. Other policy measures that need to be coordinated relate to: agricultural marketing effectiveness and efficiency; improved performance of parastatals in their redefined roles; extension services aimed at improving farmers technical skills and at assisting them in their production capabilities; development of infrastructure, including feeder roads, irrigation and storage capacities; facilitating greater access to land, especially by women; disseminating research findings so as to enhance productivity; and, promotion of greater participation of peasants and other local populations in decision-making.

233. Complementarities often exist between MERS and other policies, with the result that measures commonly applied by governments such as excise tax on exports and duty on imports need to be appropriately designed and applied if they are not to negate the desired impacts of MERS. For example, export and import tariffs on transactions to which low exchange rates are applied through the application of MERS should be fixed at levels that will facilitate the realization of the stated objectives. Similarly, contradictions may arise between concessionary interest rates granted through DIRP and SCC to the same set of activities that are accorded low priority by MERS and therefore penalised through high exchange rates.

234. In the external trade sector, the application of MERS can be complemented with measures such as advance import deposits. For example, a low exchange rate to essential imports like drugs may be supplemented with the advance import deposit to discourage excessive importation of such goods. Similarly to promote growth in domestic food production for regional food self-sufficiency, a higher exchange rate on food imports may be imposed.

235. DIRP and SCC have the principal aim of channeling credit to key industries and priority sectors at preferential interest rates. In this regard, care must be exercised in the formulation of tariffs, fiscal policy (including income, excise and sales taxes, and public expenditure policies) to ensure that they do not have a neutralizing impact on the performance and development of priority sectors. Further, policy packages should be designed also with the aim of avoiding high inflation that could render interest rates negative and, thereby, discourage savings. This is particularly pertinent to fiscal policy where large budget deficits may raise levels of inflation.

236. In addition to these complementarities and the integrated use of policy instruments, it is important to implement policy actions aimed at creating an enabling environment in which target variables will respond spontaneously and favourably to the signals transmitted by policy instruments. For instance, credit may not be accessible even at low interest rates to peasant farmers under an unfavourable land tenure system. Further, even attractive positive real interest rates may not sufficiently induce channelling of savings to productive investment in an economy characterized by high inflation rates.

6.3 Implementation

(a) Preparatory Country Studies

237. The necessity for carrying out in-depth macro-economic studies for each economy in Africa preparatory to the design of appropriate AAF-SAP policy packages has already been stressed. The initial task to be undertaken in this connection, is to clearly define the goals for adjustment with transformation that a country should strive to achieve. Where possible the targets to be achieved in the short-and medium-term should be set. The policy instruments and measures to be applied in pursuit of these goals can then be selected and combined as appropriate into policy packages.

238. As has already been shown in the discussion on complementarities and trade-offs, MERS can be applied in policy packages in concert with other policies. With this in mind, the studies preceding the design of MERS should be such as to focus on and shed light on the specific impact of individual policy instruments as well as policy packages. The following are some of the important elements of such studies:

- review of existing and past exchange rate policies, especially in the 1980s;
• financial history and profile of the country in the past decade;
• the role of exchange rate policy in the country's overall adjustment programme so far undertaken by the country;
• the main objectives as well as possible costs and benefits of MERS;
• the specific administrative and institutional machinery needed for the implementation of MERS;
• the feasible multiple foreign exchange markets that can be separated and the possible levels of the multiple exchange rates;
• related policies to MERS to be avoided as trade-offs and those to be used as complementary policies.

239. In the design of DIRP and SCC, there is need for extensive analysis of the relationships between interest rates and inflation, on one hand, and the exchange rate and the magnitude of fiscal deficits on the other. Studies on DIRP and SCC should, among other things, devote attention to the implications of these measures for the multidimensional approach that financial sector policy demands. DIRP and SCC must be well co-ordinated with fiscal policy so as to channel resources into productive and high priority sectors, increase the flow of income to identifiable groups in the population, especially the rural population, and provide stable financial environment for development.

240. In African economies fiscal policy has a critical role since the public sector is an important provider of services and accounts for a major share of GDP and capital formation in many countries, and as already stated, it is directly related to DIRP with SCC and PSP. Fiscal policy would therefore, have to be examined in great detail, focusing on issues such as: public sector borrowing to finance the fiscal deficits and public enterprises; regulations designed to maintain low interest rates on government debt; and the impact of public sector borrowing on the availability of credit.

241. In addition, there would be need for follow-up studies focusing on the impact of interest rates policy on the external sector. If interest rate differentials are not appropriately adjusted for the expected rate of depreciation of domestic currency, they may encourage the residents of a country to hold foreign exchange receipts, (including those arising from workers' remittances) as foreign currency deposits, rather than local currency. Hence the need to coordinate interest rates and exchange rate policies.

(b) Implementation Modalities

242. In order to provide for effective policy coordination and implementation, it is essential that appropriate institutional mechanisms for consultative decision making and implementation be established in ministries and other policy organs in each country. For MERS, DIRP with SCC and PSP the core ministries are finance, planning, trade, agriculture, industry and the central bank. Other ministries and parastatals, private sector institutions, as well as popular organisations should be co-opted for this integrated policy design and programme formulation and implementation. It is important that the mechanisms should also incorporate adequate administrative arrangements for the effective execution of policies and enforcement of regulations.

243. The transition from a single exchange rate to MERS should be based pragmatically on the achievement of the basic objectives of multiple rates and should also be preceded by or accompanied by extensive fiscal reforms, the basic objective of which should be the curtailment and avoidance of inflationary pressures. Second, the Central Bank will need to assume the primary responsibility for the implementation of MERS. In order to ensure that controls and discipline are enforced effectively, it is necessary to make a clear division of responsibilities among agencies involved in implementation of MERS. The Central Bank should preferably be assigned powers to impose sanctions against any violation of regulations.

244. Success in the implementation of DIRP and SCC is enhanced by the existence of specialized banks. Many African countries have established agricultural and industrial development banks which can be used for this purpose. These sectoral banks should be made to provide priority productive sectors with
their credit needs at concessionary interest rates, supervise the use of such credit, and channel available savings into productive investment. As far as possible, DIRP and SCC should be made self-financing through the re-orientation of the banks.

245. Some factors are critical to the creation of the necessary economic environment for the implementation of DIRP and SCC. These include the state of development of savings habits, the extent of monetization of the economy, the major sources of inflationary pressure, the size of government borrowing and the use of borrowed funds, the magnitude and role of foreign capital, and the level of financial intermediation. Consequently, it is important to take due account of the following aspects in designing mechanisms for implementing differential interest rates:

- the need for clear and unambiguous definition of goals and priorities;
- the establishment of simple and easy to execute mechanisms for implementation,
- the existence of well-defined time frame for the various aspects of implementation;
- the ability to enforce mechanisms and have built-in structures to ensure efficiency and compliance.

### 6.4 Monitoring

246. The monitoring mechanism for MERS, DIRP and SCC should be based on a clear division of responsibilities between the Central Bank, on one hand, and the Ministries of Finance, Planning, Trade and other institutions, on the other. A monitoring committee at ministerial level should be constituted to perform the necessary monitoring functions that should include the imposition of binding sanctions against violations of regulations relating to implementation of the policies and the enforcement of controls. This is required in order to prevent abuse and fraudulent inter-market practices.

247. In view of the need to control inflationary pressures, the monitoring systems for DIRP and SCC should also provide for the evaluation of the impact of concessionary interest rates policy on the expansion of credit. The system should provide for monitoring the main modes of implementation of DIRP and SCC, which consist mainly of direct lending by the Central Bank, reserve or liquidity requirements, and specific directives and guidelines.

248. A network covering the institutions involved in the implementation process, including development banks, commercial banks, insurance corporations and cooperative banks, should be established. The system must be simple and should provide for the compilation of the performance records of the institutions especially with regard to loans and credits to priority sectors and activities, and the preferential interest rates applicable to them. The monitoring system should also provide for the evaluation of compliance with Central Bank regulations in respect of preferential treatment of selected economic activities.

249. The monitoring system for PSP should have build-in mechanisms for the collection and analysis of data on the achievements of objectives such as encouragement of greater use of selected production inputs, stabilization of agricultural prices to farmers and peasants, provision of relatively efficient transfer of resources from the government to peasants, and improvement in the income levels of the rural population. The beneficiaries of PSP and the costs of the scheme to the government will also need to be closely monitored.
### Net Production and Self-Sufficiency Ratio in Developing Africa<sup>a</sup> (1969/71 - 1989)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>5145.23</td>
<td>6605.03</td>
<td>6506.03</td>
<td>7053.24</td>
<td>9689.72</td>
</tr>
<tr>
<td>Rice Paddy</td>
<td>4682.39</td>
<td>6508.18</td>
<td>7862.93</td>
<td>84056.62</td>
<td>9412.41</td>
</tr>
<tr>
<td>Maize</td>
<td>10007.27</td>
<td>13205.15</td>
<td>16105.5</td>
<td>18120.69</td>
<td>21422.71</td>
</tr>
<tr>
<td>Barley</td>
<td>2798</td>
<td>3437</td>
<td>3751</td>
<td>3892</td>
<td>4896</td>
</tr>
<tr>
<td>Millet</td>
<td>7124</td>
<td>8196</td>
<td>8461</td>
<td>7977.3</td>
<td>8723.78</td>
</tr>
<tr>
<td>Sorghum</td>
<td>7012.51</td>
<td>7581.92</td>
<td>9835.71</td>
<td>9195.44</td>
<td>11608.22</td>
</tr>
<tr>
<td>Other Cereals</td>
<td>1267.12</td>
<td>1368.2</td>
<td>1655.9</td>
<td>1409.2</td>
<td>523.1</td>
</tr>
<tr>
<td>All Cereals</td>
<td>38036.84</td>
<td>46362.18</td>
<td>54178.97</td>
<td>56053.91</td>
<td>66270.98</td>
</tr>
<tr>
<td>All Roots &amp; Tubers</td>
<td>44760.04</td>
<td>55791.36</td>
<td>71644.84</td>
<td>79111.91</td>
<td>84046.4</td>
</tr>
</tbody>
</table>

<sup>a</sup> Net production in 000 metric tons


### Percent share of Total Calories per caput per day for commodity groups, 1983/85

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Cereals</th>
<th>Roots + tubers</th>
<th>Vegetables</th>
<th>Sugar</th>
<th>Pulses</th>
<th>Milk</th>
<th>Meat</th>
<th>Bananas + plantains</th>
<th>Vegetables</th>
<th>Fruit</th>
<th>Citrus</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Africa</td>
<td>59.4</td>
<td>1.6</td>
<td>11.1</td>
<td>11.4</td>
<td>2.2</td>
<td>5.7</td>
<td>3.0</td>
<td>0.1</td>
<td>2.1</td>
<td>2.3</td>
<td>0.5</td>
</tr>
<tr>
<td>West Africa</td>
<td>46.6</td>
<td>25.0</td>
<td>13.5</td>
<td>3.6</td>
<td>3.1</td>
<td>1.3</td>
<td>1.9</td>
<td>2.4</td>
<td>1.4</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Great Lakes20.3</td>
<td>51.1</td>
<td>10.3</td>
<td>1.3</td>
<td>6.8</td>
<td>0.5</td>
<td>1.0</td>
<td>6.5</td>
<td>1.4</td>
<td>0.7</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Central Africa</td>
<td>38.3</td>
<td>26.3</td>
<td>13.9</td>
<td>4.5</td>
<td>3.6</td>
<td>1.4</td>
<td>3.0</td>
<td>0.9</td>
<td>1.7</td>
<td></td>
<td>0.1</td>
</tr>
<tr>
<td>Eastern and Southern Africa</td>
<td>16.2</td>
<td>5.7</td>
<td>4.9</td>
<td>5.6</td>
<td>2.8</td>
<td>2.9</td>
<td>3.1</td>
<td>0.7</td>
<td>0.7</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Africa&lt;sup&gt;1&lt;/sup&gt;</td>
<td>50.5</td>
<td>17.3</td>
<td>10.8</td>
<td>6.4</td>
<td>3.9</td>
<td>3.0</td>
<td>2.5</td>
<td>2.5</td>
<td>1.4</td>
<td>1.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

<sup>1</sup> Excludes the following countries, Comoros, Cape Verde, Sao Tome and Principe, Equatorial Guinea, Guinea Bissau, Djibouti.

occupational groups. Some of the OECD countries have even had systems of comprehensive income support requiring extensive government interventions.

204. The extent of food price support in some developed countries in the recent past is summarized in the Table 5.3. It is clear from the table that for a number of reasons, developed countries have had to maintain fairly high levels of agricultural price support. What is not indicated in the table, but needs emphasis, is the fact that through the persistent use of these agricultural price support policies since the 1950s, the OECD countries that were not self-sufficient in food attained food self-sufficiency with considerable subsequent surpluses.

205. There are also numerous cases of developing countries that have used agricultural price support policies successfully to transform their agriculture. Among the documented successes are countries like South Korea, Thailand and India in Asia; Venezuela, Argentina and Brazil in Latin America; as well as Zimbabwe, Kenya and Malawi in Africa. The latter three African countries have achieved self-sufficiency in staple food items, partly through the use of price support systems which entailed fixing producer prices seasonally. Therefore, the argument that price support is sustainable only in developed countries does not hold.

| Table 5.3 |
| Levels of farm Support in OECD Countries (in billion dollars) |
| **Australia** | | | |
| Net total value | 1.37 | 1.18 | 1.31 | 1.30 |
| Per cent | 10.00 | 11.00 | 10.00 | 10.00 |
| **EC** | | | |
| Net total value | 62.41 | 68.39 | 62.45 | 53.02 |
| Per cent | 50.00 | 48.00 | 43.00 | 38.00 |
| **Japan** | | | |
| Net total value | 34.12 | 35.31 | 37.07 | 33.69 |
| Per cent | 75.00 | 76.00 | 75.00 | 72.00 |
| **US** | | | |
| Net total value | 44.68 | 45.63 | 39.31 | 32.26 |
| Per cent | 42.00 | 40.00 | 35.00 | 27.00 |
| **OECD Average** | | | |
| Net total value | 163.21 | 173.30 | 163.00 | 141.18 |
| Per cent | 51.00 | 49.00 | 45.00 | 39.00 |

Source: OECD, March 1990.

**Notes:**

1/ Calculated in terms of producer subsidy equivalent (PSE) - the value of transfers to the farmer from the taxpayer and consumer.

2/ Estimates

3/ Projections

### 5.4 Design and Application of PSP for Food Self-Sufficiency

**(a) Lessons of Experience**

206. There are extensive experiences with the use of price support policies in developed and developing countries which offer useful lessons and practical guidance for the operational design and implementation of these policies. In Africa, Asia and Latin America, price support policies have been used with varying degrees of success to achieve such diverse objectives as food self-sufficiency, increased production of selected crops, producer price stability and distributional equity. These are in addition to
the OECD's application of these policies, such as the EEC's Common Agricultural Policy (CAP), the United States agricultural support programme and others in the developed countries.

207. The design and application of these policies in African countries have sometimes been supplemented with input subsidies. These input subsidies, especially on fertilizer, have for example, amounted to 100 per cent on cotton and irrigated rice fertilizer in Cote d'Ivoire, 100 per cent on phosphate rock in Senegal, 63 per cent on fertilizer in Gambia, 75 per cent in Nigeria, 53 per cent in Sierra Leone, 90 per cent in Guinea and around 75 per cent on the cost of irrigation water in Burkina Faso. Kenya, Malawi and Zimbabwe concentrated their policies on price support mechanisms, producer and retail price control, regional price differentials, pan-territorial pricing and two price schemes together with agricultural marketing. While the subsidies were usually granted for specific current inputs like fertilizer, machinery and irrigation water, or for selected commodities like maize and tobacco in Zambia after 1982, the price support measures were usually for selected major crops, operated through marketing agencies, fixed annually and adjusted to the rate of inflation. While most of the input subsidies failed in these African countries, the combined production subsidies and price support policies succeeded fully in Zimbabwe in the 1970s and 1980s, and partially in Zambia with self-sufficiency in basic agricultural foods by the mid-1980s.

208. In Asia, Indonesia, South Korea, Thailand and India designed and applied price support policies very successfully, while Bangladesh achieved increased food production but suffered food shortage and efficiency losses. These countries also combined price support like domestic price stabilization, purchase and released prices and price control, with input subsidy on fertilizer. Indonesia extensively used producer price stabilization with minimum and maximum urban prices of rice, although it relied mostly on fertilizer and rice subsidies to achieve rice self-sufficiency during 1969/86 with "...the biggest increase (in fertilizer use) in the world". South Korea combined purchase and release prices that exceeded wholesale prices with fertilizer subsidy to increase rice yield by 50 per cent during 1970/78 and raised producer price by 500 per cent while the consumer price index rose by only 300 per cent. Thailand used rice reserve requirement and rice export premium or tax with fertilizer subsidy from 1960 through 1973 to remain a net rice exporter.

209. India used guaranteed minimum price for food grains along with subsidies on fertilizer, irrigation and credit. The food grain subsidy bridges the gap between the producer price to farmers that is announced before planting and the lower consumer price for the poor as well as the grain distribution cost to government. In Peru, price support policy was used to achieve self-sufficiency in potato production. Argentina, Brazil and Venezuela also successfully used price support measures in their policies for food self-sufficiency.

210. From the empirical evidence, input subsidies, failed in most African countries and Bangladesh because their costs tended to become unmanageable, particularly marketing and food subsidy costs. These weighed too heavily on government budgets and rendered them inefficient. Moreover, subsidized inputs like fertilizer were often diverted and sold rather than used in the production process; their price bias against agriculture was usually excessive; the timing of their incentives was often faulty for production decisions; they were not sufficiently complemented with other appropriate measures such as extension service, agricultural infrastructure, credit, storage, etc. They were often not targeted and without time limit for their application.

211. By contrast, the empirical cases of successful design and implementation of price support policies in Zimbabwe, Venezuela and the Asian countries typically involved an appropriate mix with input subsidies at moderate costs. Their producer prices tended to be fairly close to parity or market clearing prices with their nominal prices adjusted to the level of inflation, and there was effective use of coordinated application of complementary measures. The institutional arrangements were also effective, consultative and durable.

(b) PSP Package

212. As in AAF-SAP, a general policy package for food price support has to be flexible enough to be adaptable to the special circumstances of individual African countries. This is to ensure that as with AAF-SAP policy instruments in general, the price support package can also constitute a menu from which
different countries can design their own support policies to reflect their concrete conditions. This involves the identification of the basic objectives and approaches to PSP as outlined below.

(i) Objectives

213. The main objectives of price support policy in African countries are:

- achievement of regional food self-sufficiency, especially in staple cereals like rice, wheat, maize, sorghum and millet that account for more than 90 per cent of Africa’s cereals consumption requirements;
- to ensure remunerative producer prices as incentives for increased food production to eliminate instability in food price;
- to eliminate seasonal food shortages and restrain the associated price instability;
- to ensure equitable access to food, especially by the poor.

214. In these ways, the food price support package will simultaneously eliminate Africa’s chronic food shortage, promote long-run transformation and satisfy basic welfare requirements. It is because these goals are so fundamental to national development that the developed countries and many developing countries rightly persist with the operation of food price support policies.

(ii) Approaches to PSP

215. Food production support policies may be commodity oriented, cost reducing, fiscal transfer measures or a combination of them. They are applied to major food crops, mainly for price and income stabilization as well as for food marketing. The common examples are:

- market price support at pre-determined levels above world market prices so that consumers bear most of it, or guarantee to producers of relatively low floor prices offering only minimum support with consumers paying higher market prices;
- price supplements to stimulate production by small-holders with payments linked to output and affecting production decisions;
- two-price schemes separating domestic and export markets by using a marketing agency that fixes minimum and maximum prices in order to protect producers (and consumers) from large price fluctuations;
- stabilization schemes (seasonal or over years) for producer prices to even out farm incomes over given periods, and offering stability to assure the continuity of production in an agricultural sub-sector (e.g. cereals), against short-run weather disturbances (e.g. drought) that cause severe output variations, fluctuations in costs and prices, and/or in world demand. In periods of less-than-average income, producers are paid from the stabilization fund to raise incomes to agreed minimum level with the payments proportional among growers (e.g. to growers’ average contributions to the fund over say past three years so that the scheme is funded by growers);
- intervention buying and selling of agricultural commodities to prevent prices falling or rising beyond guaranteed levels so that the intervention prices are lower than guaranteed producer prices — the excess commodities bought are stored or exported (e.g. United States has three-year grain reserve);
- border measures offering preference to domestic producers over foreign competitors or used for the disposal of domestic excess supply of commodities on the international market. Examples of these border measures are import restrictions, export promotion, deficiency payment on export sales, price pooling between domestic and export markets, and cheap export credit.

216. The most common examples of these food price support policies that have been used successfully in developing countries are market price support, two-price and stabilization schemes, intervention buying and selling by marketing boards or agencies and border measures. They are fairly simple to
design, of limited budget cost, flexible enough to allow for the operation of market forces and minimize price distortions, while offering effective incentives that have increased food production in several countries.

(c) Operational Modalities

217. But, while the case for aiming at price stability for food through price support policies is strong, at least in the context of Africa's contemporary reality, the following some basic issues are important in the design and operationalization of a PSP package:

- the purpose for food price stabilization (whether for producers and/or consumers);
- the choice of the food commodities whose prices are to be stabilized;
- the choice of the most cost effective way of food price stabilization;
- the duration of the policies of price support to ensure price stability;
- the criteria (reflecting economic, political and social considerations) to be used in setting price levels of selected food commodities.

218. The realization of the many advantages and potential of food price support policies in African countries requires the satisfaction of some basic pre-requisites. These are so critical throughout the stages of policy design, operationalisation and monitoring that they deserve careful identification. Thus as in other policy situations, effective administrative machinery is essential for the successful application of food price support. This involves trained staff, accurate information on crop production and market situation, assured funds and adequate infrastructure for transportation, marketing and logistics. Capacity for serious economic analysis of micro and macro links and possible effects of price support is also essential. The Ministry of Agriculture should be the focal point for developing this administrative machinery. A reliable marketing network is equally important in order to facilitate procurement, storage and commodity sale.

219. It is equally necessary to emphasize again that though price support is fundamental, it is insufficient for achieving food self-sufficiency, and should be complemented with other measures. These should include input subsidies, public investment in infrastructure (storage irrigation feeder roads etc.), and macro policies such as appropriate exchange rate and the control of inflation.

220. The operation of the price support mechanism call for careful targeting and sound economic criteria. The relevant targets for African countries are major cereals, the supply levels required to achieve regional self-sufficiency and the specific producers, both large and small, involved. Among the relevant economic criteria are the costs and benefits, relevant comparative advantages and disadvantages and trade-offs, e.g., between price support and agricultural taxation, import duties and export sales rebates, etc. The anticipated supply response should also be desagregated into: (i) aggregate agricultural food output or the elasticity of aggregate agricultural food supply; (ii) commodity composition of total agricultural food output, especially the cereals component; and (iii) the marketed surplus from total output, which is what will be available as food supply to consumers, raw materials for domestic use and excess output for storage or export.

221. These considerations should point to the need for balancing the complexity and scope of price support with available funds and administrative capacity. The cases of successful application of price support typically involved limited budget cost and price coverage with periodic review in order to adjust to changing fiscal, demand and supply trends.

222. Finally, success in the use of price support in countries like Zimbabwe, Kenya and Malawi underscores the importance of consultation with the producers of the crops involved. Farmers' unions or associations should be widely and regularly consulted, and prices should be announced before planting or pre-harvest. Whichever method is adopted to suit the peculiarity of individual countries, the farmers should participate actively in the programme at all levels and with full and timely information.

223. The actual administrative modalities for the implementation of agricultural production support policies should focus mainly on price support as the generalized form of productive subsidy or incentive
package. The food price policy should provide the overall frame within which individual policy measures and marketing agencies operate. Hence the specific modalities for the application of the production support package should involve:

(i) **Institutional machinery** — this should consist of public and private organs with three basic units, namely, Ministry of Agriculture, marketing mechanism and farmers' unions or associations. The Ministry of Agriculture should be at the centre of any price support policy both in its conceptualization and implementation. It should coordinate the overall agricultural support programme, including general price support. Its task could be facilitated if, like in Malawi, there is an inter-ministerial price policy advisory committee that works closely with it. The marketing mechanism is the core of price policy as governments implement price support through it. This marketing organ can consist of a parastatal (e.g., marketing board), cooperative marketing bodies and private buyers and sellers to allow for a significant role for free market forces. These marketing bodies should enjoy basic autonomy and perform a price stabilization role through the provision of marketing margins within and between countries. The farmers' associations should offer extensive consultation on prices, other incentives, distribution networks and collection of information.

(ii) **Target, coverage and output level** — the target of the price support policy should include both large and small farmers with the crop coverage limited to major cereals like rice, maize, sorghum, millet and wheat. The basic objective is to achieve regional self-sufficiency in these cereals, but the commodity quantities to which price support should apply should be limited to available administrative capacity and funds. It is better to start with one or two of these crops depending on the situation in each country.

(iii) **Major pricing policies** — these should be primarily:

- **Minimum or floor prices** for selected commodities (staple cereals) below which the market prices should not be allowed to fall. When prices tend to fall below the floor, the marketing agency should buy excess quantities for reserve in order to raise the price to remunerative level;
- **Seasonal price stabilization** or seasonal pricing to smooth crop prices to stable levels within and between seasons through purchase at harvest and release of supplies from buffer stocks during scarcity periods. This is the standard function of the marketing board system whose marketing margins generate accumulated funds for price and income stabilization;
- **Regional pricing** is also necessary in order to enforce domestic price support by incorporating price differentials within a region or sub-region that arise from differences in production costs, productivity, transport costs and related factors. This regional pricing is useful for controlling smuggling across borders and promoting the regional harmonization of agricultural pricing. It can also be used through two-price schemes (domestic and foreign) for protecting domestic crop production against foreign food dumping.

(iv) **Price level determination** — the determination of the actual level of support prices, like the stability of the prices, is a major determinant of the impact of price support on food production. The typical approach is to set the support prices within a range of annual changes in real producer prices, as well as a range for consumer prices. These ranges or bands are for the producer prices of major crops whose yearly fluctuations are kept within a pre-determined range, and for pre-determined maximum rise in the consumer prices of basic foods in real terms per annum.

(v) **Macro linkages of price support** — the direct and indirect repercussions of changes in food and agricultural prices throughout the economy should be analyzed. The links between the agricultural sector and the national economy should be identified in policy design in order to avoid inter-sectoral price distortions and other economic disparities. Relative price bias against agriculture should thus be eliminated with respect to exchange rate, taxation, industrial promotion and public investment.

(vi) **Periodic monitoring of agricultural support policies** — periodic check of the consistency and impact of various measures, in agricultural and non-agricultural sectors, on input and output prices is essential. This involves the consideration of relative, rather than absolute prices, modifying existing prices relative to supply and demand conditions, and analyzing the effects of input subsidy on under utilized modern inputs with respect to economic efficiency and technological innovation. These should also include adequate financial provision for the price support programme.
(d) Financing of PSP

224. The successful implementation of any price support policy package depends critically on its effective funding and the ability to minimize the fiscal transfer element that might be involved explicitly or implicitly in price support programmes. In order to facilitate their successful funding, the financial implications of price support policies should be analyzed in advance in order to ensure, among others, that the expected increase in rural income derived from the application of price support, is translated to a large extent into effective demand for other sectors of the economy; the coverage or scope of the policies should be limited; expensive pan-territorial pricing should be avoided.

225. The establishment of buffer stocks is an essential requirement in the successful implementation of PSP. Even without the implementation of PSP, however, the need to maintain buffer stocks and adequate storage facilities for food has increasingly been recognized in African countries. In this respect, many countries in East Africa have established buffer stocks capable of lasting for six months or more following periods of crop failures or lean harvests, although none of these countries have before now tied this to the application of PSP. Obviously, in countries which already have some buffer stocks, the introduction of PSP will involve no initial capital outlays or impose little or no additional costs. It is in countries without existing buffer stocks that the financing requirements of PSP will involve new capital outlays in order to start the scheme.

226. In order to facilitate the successful funding of PSP, the financial implications of the introduction of such policies will have to be analyzed well in advance, and every care taken to ensure that the policies are limited in coverage, while at the same time expensive pan-territorial pricing is avoided. The actual funding of PSP can thus be on two accounts:

(i) **Use of self-financing market mechanism** — the allowance of significant role for market forces in the operation of price support can make much of it self-financing or even profitable. Thus self-financing cooperatives and private distributors can be allowed to implement the price support for some food crops or in some areas. Public marketing agencies or parastatals can also be commercialized to operate at least on cost-recovery basis.

(ii) **Revenue from buffer stocks** — this accrues by setting minimum or floor prices at levels that are close to domestic market prices and gaining the differential between maximum or actual market prices and the minimum price support. This requires efficient management of food reserves through cost-effective marketing with adequate transportation, storage and distribution channels.
6. Implementation Strategies and Monitoring

6.1 Introduction

The preceding chapters have been devoted to detailed discussion of MERS, DIRP with SCC and PSP, focusing on their theoretical basis, empirical evidence and experience in their design and application in relation to the African economies. Their incorporation in policy packages for the operationalization of AAF-SAP have also been discussed. In this chapter attention will be focused mainly on the following: the complementarities and trade-offs among policy instruments; the preparatory country studies on the basis of which appropriate policies applicable to the unique socio-economic situations in specific African countries are to be determined; the implementation approaches; and monitoring of the implementation of the policies.

As emphasised in AAF-SAP there is need for each country to design its own policy package that will appropriately address its unique economic and social problems. In this connection, there are a number of actions to be taken by national policy makers. The first is a thorough analysis of the economic and social problems in each country in order to establish the appropriateness of policies included in the policy package, preferably drawing from the recommended policies listed in Table 5.2 of AAF-SAP. While the three policies discussed in this document are crucial to the process of adjustment and transformation in African countries there can be little doubt that they need to be applied with other policy instruments in appropriately designed policy packages. It is necessary therefore that each policy package should be designed taking cognisance of complementarities and trade-offs among policies. A coordinated and harmonized application of policies that concretely identify these complementarities and trade-offs is thus a requirement of the design of sound policy packages. Sound implementation modalities and monitoring mechanisms for the implementation of policies also need to be formulated and made operational.

6.2 Complementarities and Trade-offs

In line with the holistic approach of AAF-SAP, national policy package must be designed in such a manner as to emphasize and capture the inter-relationships among economic variables, actors and institutions. “It is expected also in AAF-SAP that policy instruments and measures adopted by individual African countries are well co-ordinated among themselves so that they can achieve desired effects.”

By way of examples, some of the important complementarities among MERS, DIRP with SCC and PSP and other policies can be highlighted in this section. While PSP is recommended for the achievement of regional food self-sufficiency, it can be complemented with a number of other policies. For instance, DIRP and SCC can support PSP in achieving the food self-sufficiency goal through the extension of credit to food growers at lower interest rates. One of the problems faced by farmers is access to credit, especially on concessionary terms. The use of DIRP and SCC provides a possible solution to this problem that has generally constrained food production.

Furthermore, PSP can be reinforced by MERS through the provision of a more favourable exchange rate for importation of farm inputs. As stressed in Chapter 5, backward technology, including inadequate application of inputs such as fertilizers and pesticides, are principal causes of low food productivity. MERS can thus be used to promote increased supply of these items by providing a lower exchange rate for their importation. To achieve the maximum benefits, these policies have to be
appropriately co-ordinated and supported by other measures such as improving agricultural marketing and input delivery systems, and the initiation of trade policies to promote local food production and discriminate against food imports.

232. Other policy measures that need to be coordinated relate to: agricultural marketing effectiveness and efficiency; improved performance of parastatals in their redefined roles; extension services aimed at improving farmers technical skills and at assisting them in their production capabilities; development of infrastructure, including feeder roads, irrigation and storage capacities; facilitating greater access to land, especially by women; disseminating research findings so as to enhance productivity; and, promotion of greater participation of peasants and other local populations in decision-making.

233. Complementarities often exist between MERS and other policies, with the result that measures commonly applied by governments such as excise tax on exports and duty on imports need to be appropriately designed and applied if they are not to negate the desired impacts of MERS. For example, export and import tariffs on transactions to which low exchange rates are applied through the application of MERS should be fixed at levels that will facilitate the realization of the stated objectives. Similarly, contradictions may arise between concessionary interest rates granted through DIRP and SCC to the same set of activities that are accorded low priority by MERS and therefore penalised through high exchange rates.

234. In the external trade sector, the application of MERS can be complemented with measures such as advance import deposits. For example, a low exchange rate to essential imports like drugs may be supplemented with the advance import deposit to discourage excessive importation of such goods. Similarly to promote growth in domestic food production for regional food self-sufficiency, a higher exchange rate on food imports may be imposed.

235. DIRP and SCC have the principal aim of channeling credit to key industries and priority sectors at preferential interest rates. In this regard, care must be exercised in the formulation of tariffs, fiscal policy (including income, excise and sales taxes, and public expenditure policies) to ensure that they do not have a neutralizing impact on the performance and development of priority sectors. Further, policy packages should be designed also with the aim of avoiding high inflation that could render interest rates negative and, thereby, discourage savings. This is particularly pertinent to fiscal policy where large budget deficits may raise levels of inflation.

236. In addition to these complementarities and the integrated use of policy instruments, it is important to implement policy actions aimed at creating an enabling environment in which target variables will respond spontaneously and favourably to the signals transmitted by policy instruments. For instance, credit may not be accessible even at low interest rates to peasant farmers under an unfavourable land tenure system. Further, even attractive positive real interest rates may not sufficiently induce channelling of savings to productive investment in an economy characterized by high inflation rates.

6.3 Implementation

(a) Preparatory Country Studies

237. The necessity for carrying out in-depth macro-economic studies for each economy in Africa preparatory to the design of appropriate AAF-SAP policy packages has already been stressed. The initial task to be undertaken in this connection, is to clearly define the goals for adjustment with transformation that a country should strive to achieve. Where possible the targets to be achieved in the short- and medium-term should be set. The policy instruments and measures to be applied in pursuit of these goals can then be selected and combined as appropriate into policy packages.

238. As has already been shown in the discussion on complementarities and trade-offs, MERS can be applied in policy packages in concert with other policies. With this in mind, the studies preceding the design of MERS should be such as to focus on and shed light on the specific impact of individual policy instruments as well as policy packages. The following are some of the important elements of such studies:

- review of existing and past exchange rate policies, especially in the 1980s;