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## AGRICULTURAL INVESTMENT AND THE AOI: A PATH TO SUSTAINABLE DEVELOPMENT

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The importance of Target 2.a in the context of Sustainable Development Goals (SDGs) cannot be overstated. Target 2.a specifically addresses the need to increase investment in agriculture to enhance productive capacity in developing countries. This commitment is crucial for achieving food security, promoting sustainable agricultural practices, and realizing the overarching goal of Zero Hunger. The article delves into the various sources of investment in agriculture, emphasizing the role of both private and public flows. It highlights the significance of Indicator 2.a.1, the Agriculture Orientation Index (AOI), as a key metric for evaluating government expenditure's alignment with the agricultural sector's contribution to the economy. The AOI not only provides insights into economic structures but also serves as a valuable tool for policymaking, risk management, and international comparisons.

### Why is Target 2.a So Crucial?

Agricultural investment is crucial for decreasing hunger and advancing sustainable agricultural output. The African Union established goals in the Maputo and Malabo Declarations to boost public investment in agricultural and rural development as well as productivity in the sector. However, as this graph shows, agricultural investment is declining in our nation. In order to accomplish the Zero Hunger Goal and guarantee food security for our people, we must halt this detrimental trend.

### Sources of Investment in Agricultural

A number of players are essential to the financing of the agriculture industry. Their contributions to the industry vary in scope and objectives.

There are essentially four sources of investment in agriculture:

- **Private flows-**
  - Domestic (Private equity and credit)
  - Foreign (Direct investment)
- **Public flows-**
  - Domestic (Government expenditure)
  - Foreign (Development flows)

## 1. Private Flows

### a) Domestic (Private equity and credit)

In many nations, domestic private financing, spearheaded by agricultural stakeholders, serves as the main source of funding for agriculture. In order to manage high risks resulting from uncertainties in elements like price volatility, pests, illnesses, and disasters that alter the timing and outcomes of agricultural investments, this involves reinvested savings (private equity) and credit from financial institutions.

### b) Foreign (Direct investment)

International firms engage in private foreign financing of agriculture through foreign direct investment, with the goal of achieving long-term management control. Positive effects include market growth and the transmission of information, but negative effects include land grabbing and social and environmental issues.

## 2. Public flows

### a) Domestic (Government expenditure)

Government spending in agriculture is essential to addressing market imperfections, fostering private investment, and assisting in the redistribution of income to the most vulnerable farmers. For projects like soil enhancement, irrigation, and animal health management—which the private sector would overlook—public subsidies are essential. Furthermore, government support is necessary to protect smallholders who are exposed to significant risks and unstable incomes.

## b) Foreign (Development flows)

The main players in the public foreign sector of agriculture investment are foreign government agencies, bilateral donors, and multilateral organizations. The goal of these flows—better known as Other Official Flows (OOF) or Official Development Assistance (ODA) is to advance the welfare and socioeconomic advancement of developing nations.

### Target 2.a Indicators

Countries have pledged to increase investment in order to increase the productive capacity of agriculture in developing nations through Target 2.a of the SDGs. Two indicators that track the flow of public funding to agriculture are used to track success toward this goal.

#### 1. Indicator 2.a.1

##### The Agriculture Orientation Index (AOI) for Government Expenditures

- It refers to the public domestic flows (government expenditure) in agriculture and compares the government’s contribution to the agricultural sector with the sector’s contribution to Gross Domestic Product (GDP).
- The custodian agency for this indicator is FAO.

#### 2. Indicator 2.a.2

**Total official flows (official development assistance plus other official flows) to the agriculture sector.**

- The custodian agency for this indicator is the Organization for Economic Co-operation and Development (OECD).

#### Indicator 2.a.1

The indicator 2.a.1, the Agriculture Orientation Index for Government Expenditures (AOI), is a currency-free measure, calculated as the ratio of two shares:

$$AOI = \frac{\text{Agriculture Share Of Government expenditure}}{\text{Agriculture Value added as share of GDP}} = \frac{\frac{\text{Government Expenditure on Agriculture}}{\text{Total Government on Agriculture}}}{\text{Agriculture Value added/GDP}}$$

- The International Monetary Fund (IMF) Statistics Department collects data on government expenditures from countries using an annual questionnaire. The FAO Statistics Division then supplements this data with data gathered from official government publications and websites, or it can be compiled using the Government Finance Statistics Manual 2014 (GFSM 2014) methodology.
- The System of National Accounts is the source of the GDP value addition data related to agriculture.
- The FAOSTAT Government Expenditure on Agriculture database contains the information and the indicator.

The AOI conveys the orientation of the government expenditure – current and capital outlays - to the agricultural sector compared to its contribution to the total economy.

### Different-different Conditions of AOI

- **Condition 1.** If  $AOI > 1$ , It means higher orientation of the government expenditure to the agricultural sector compared to its contribution to the total economy.
- **Condition 2.** If  $AOI < 1$ , It means lower orientation of the government expenditure to the agricultural sector compared to its contribution to the total economy.
- **Condition 3.** If  $AOI = 1$ , It means neutrality in government's orientation to the agricultural sector.

### Advantages of Agriculture Orientation Index

The AOI provides valuable insights into a country's economic structure and its dependence on agriculture.

Here are some advantages of using the Agriculture Orientation Index:

- a) **Economic Structure Assessment:** The AOI is useful in assessing a nation's or region's economic structure. It shows how significant agriculture is in relation to other economic sectors. An economy with a high AOI is thought to be mostly agrarian, whereas one with a low AOI is thought to be more diversified.
- b) **Development Planning:** The AOI can be used by governments and policymakers to help them decide which economic development initiatives to pursue. A high AOI, for instance,

can indicate that diversification is necessary to lessen economic susceptibility to changes in agriculture productivity.

- c) **Risk management:** An economy that depends significantly on agriculture is frequently more susceptible to external variables like pests, weather, and changes in the price of commodities. Policymakers can detect and manage the dangers related to this reliance with the aid of an AOI.
- d) **Investment Decisions:** The AOI can be used by domestic and foreign investors to determine whether it is desirable to make an investment in a specific area or nation. A diverse economic structure and a more favourable investment climate may be indicated by a low AOI.
- e) **Policy Formulation:** Strategies and policies pertaining to commerce, agriculture, and rural development can be shaped by the AOI. Governments can use it as a guide when putting policies into place that balance or assist the agriculture sector in the overall economy.
- f) **Tracking Progress:** The AOI can be used to track alterations in a nation's economic structure over time. The AOI may decline as economies grow and diversify, indicating progress in lessening reliance on agriculture.
- g) **International Comparisons:** The AOI makes it possible to compare the economic systems of several nations internationally. This index can be used by institutions and researchers to examine patterns and distinctions in the contribution of agriculture to different national economies.
- h) **Sustainability and the environment:** Because of intensive farming techniques, high AOI values may suggest a higher degree of environmental impact. This can be used to promote sustainable practices and raise awareness of the negative environmental effects of agriculture.
- i) **Rural-Urban Development:** The degree to which rural communities rely on agriculture for their livelihoods can be evaluated using the AOI. When creating policies and initiatives for rural development, this information is invaluable.

- j) **Research and Analysis:** By examining the AOI's correlations with other economic indicators and factors, researchers can conduct in-depth analysis and modelling in economic and agricultural studies.

## Conclusion

Target 2.a's emphasis on increasing agricultural investment is paramount for achieving food security and sustainable development. The Agriculture Orientation Index (AOI) serves as a vital metric, offering insights into economic structures and guiding policy decisions. As nations strive to meet SDG commitments, the AOI proves invaluable in assessing economic vulnerabilities, informing development planning, and fostering international comparisons. Its multifaceted advantages, from risk management to sustainability considerations, underscore the AOI's significance in shaping a resilient and balanced global agricultural landscape.

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