

***NIGERIA COUNTRY
WORKSHOP***

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***Research Output on
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Development***

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TOPIC



The ISMED Model and Policy Strategies for Clusters, Networks and Innovation in Nigerian Small and Medium Scale Enterprises (SMEs).

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Motivation

The research findings on clusters, networks and innovation in Nigerian SMEs revealed some conventional results similar to previous studies on African SMEs in terms of employment creation and income generation .

Three unique findings that emerged from the study:

- ❖ Small enterprises cluster with high degree of informality characteristics can be active and as well be competitive in local market by using different marketing strategies to overcome external competitive pressure.**
- ❖ Regionalisation processes and liberalisation of the market in sub-Saharan African countries have led to increased trading networks across the borders of Anglo and Franco phone countries in African sub-regional market.**
- ❖ Innovative activity in small enterprises in sub-Saharan Africa is a survival strategy in an open economy.**

Motivation

However, marginalisation of African SMEs in the global production networks remain a major problem in the ongoing globalisation processes.

Four empirical outcomes of the study explained the problems of Nigeria's industrialisation efforts.

- ❖ The capability gap problem reflecting low technological application in the production activities of SMEs**
- ❖ Low human capital development which has contributed to low productivity per worker.**
- ❖ Poor domestic investment as a result of low capital base contributed to low quality of input and outputs.**
- ❖ Weak institutional support and policy environment**

RESEARCH QUESTIONS

These factors arguably suggests that

- ❖ **Nigerian SMEs lack the potential to play their role in economic development in terms of poverty alleviation.**
- ❖ **Cannot sustain employment**

Questions

- ❖ **How can the technological disadvantages in Nigerian SMEs be reduced?**
- ❖ **How can the linkages with large firms be fostered?**
- ❖ **How can the institutional and policy environment be strengthened in order to improve the capabilities of Nigerian SMEs?**

To answer these questions, the study looked into the relationship between investment and firm growth. This produced the background concept of the ISMED model

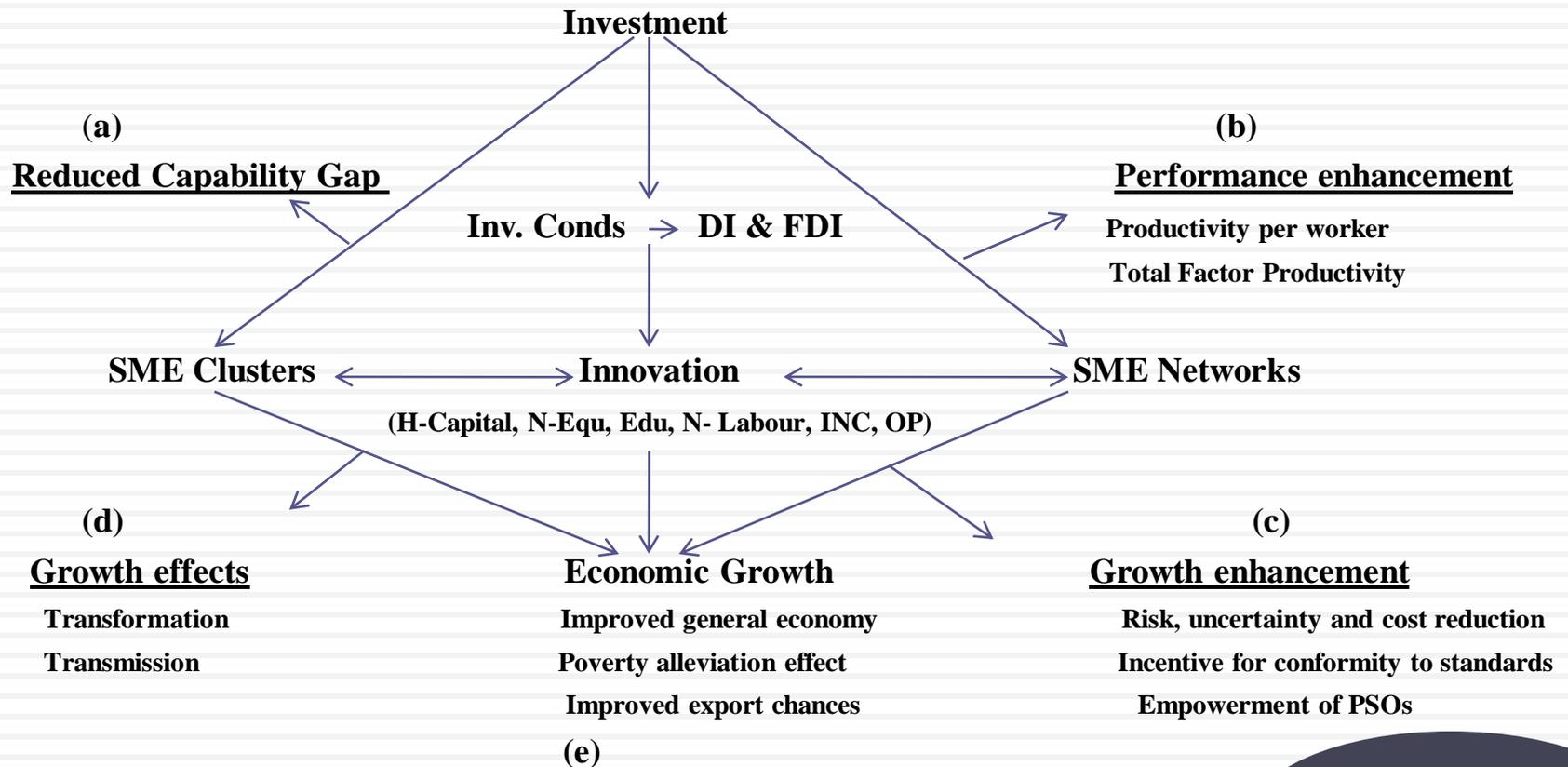
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WHAT IS ISMED MODEL?

- ❖ **The ISMED is a system model analysing the relationship between investment and SME Development.**
- ❖ **The model is a simple interactive process illustrating :**
 - ✓ **how technology disadvantages of SMEs can be reduced**
 - ✓ **how linkages can be fostered**
 - ✓ **how institutional environment can be strengthened in order to improve the capabilities of the SMEs in Nigeria and Africa in general**

THE ISMED MODEL

Investment and SME Development (ISMED) Model



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Assumptions

- ❖ **The ISMED model is build upon the concept of new growth theory under the assumption that:**
- ❖ **Accumulation of human and physical capital can impact economic growth.**
- ❖ **The nature of physical, institutional and social infrastructure in a given location can stimulate investment**
- ❖ **domestic investment and FDI backed by effective policies can contribute positively to capability gap reduction in SMEs and stimulate economic growth.**

The Analysis of the ISMED Model

- ❖ **Investment and capability gap reduction**
- ❖ **Investment and performance enhancement**
- ❖ **Investment and institutional development for growth enhancement**
- ❖ **ISMED Model and Transformation effects (*Firm Growth*)**
- ❖ **ISMED Model and Transmission effects (*Economic Growth*)**

Investment and Capability Gap Reduction

- ❖ **The investment strategies of the government to attract FDI and strengthen local firms to invest**
 - **physical infrastructure**
 - **institutional infrastructure**
 - **human capital**
 - **financial market stability**
 - **ICT**

- ❖ **The investment strategies of the local firms to improve Capabilities**
 - **human capital**
 - **modern technology**
 - **Good quality raw materials**
 - **financial accumulation**
 - **ICT**

Investment and Performance Enhancement

- ❖ **The long term sustainability of SMEs and the economy depends on**
 - ✓ **improved productivity of workers**
 - ✓ **growth in Total Factor Productivity (TFP)**
- **Improved productivity of workers depends**
 - ✓ **accumulation of physical capital**
 - ✓ **skill of workforce**
 - ✓ **technological change in the firm and environment**
- **Growth in Total Factor Productivity (TFP) depends**
 - ✓ **wage and non-wage conditions**
 - ✓ **acquiring new technology and know-how**
(through licensing, joint ventures)
 - ✓ **capacity building programmes**

Investment and Institutional development for Growth Enhancement

❖ The irreversibility of investment demand measures

- to reduce uncertainty
- to reduce the opportunity cost of postponing investment
- streamline information accurately
- to improved general business environment

This leads to the creation of network ties by coherent groups with strong interdependencies
(social networks)

❖ Institutional stability is imperative as economy expands in order :

- to reduce transaction cost involve in formalising and coordinating business ventures
- enforcement of property rights
- contract enforcement
- Empowerment of PSOs

The ISMED and Transformation Effects

(Firm Growth)

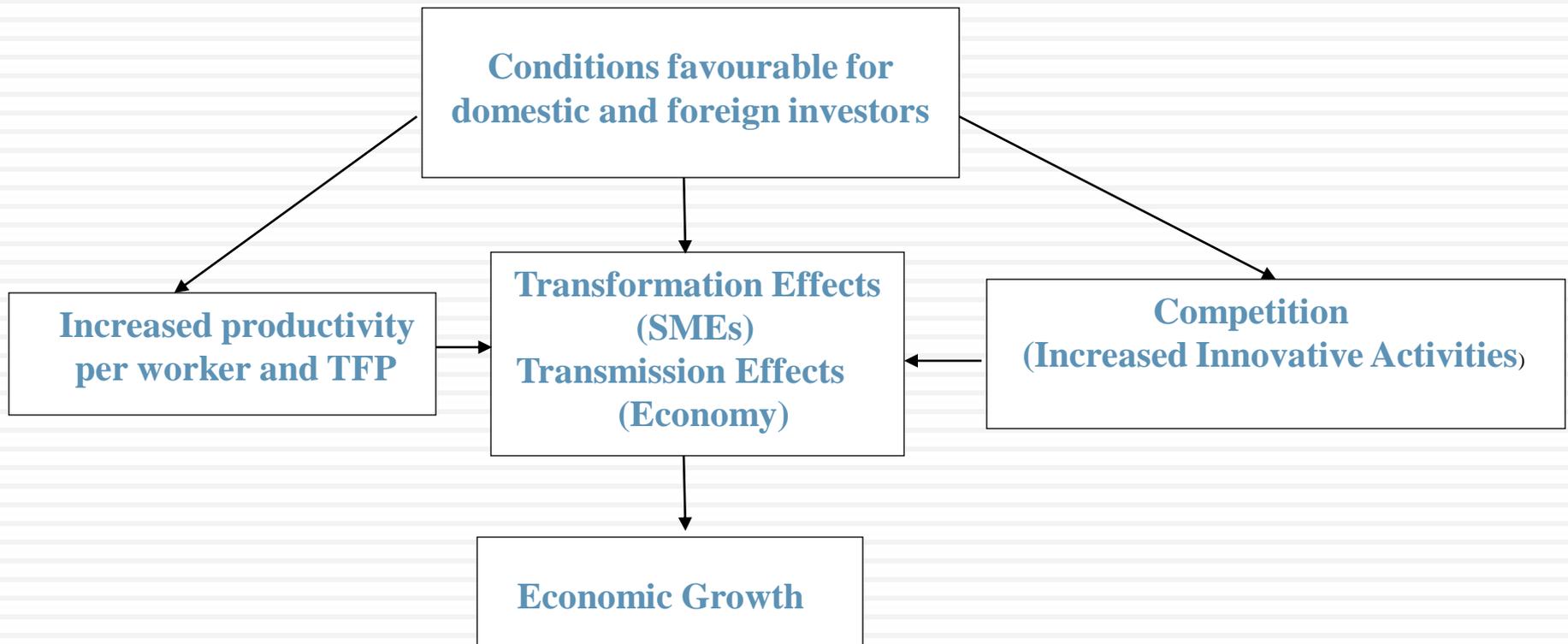
- ❖ **The transformation processes are the positive changes firms experience as a result of their investment strategies.**
 - **Changes in the internal production process that allow individual small enterprises to achieve economies of scale and scope**
 - ✓ **growth process in terms of size structure or increased scale overtime in micro and small enterprises.**
 - ✓ **induced export opportunities as a result of improved capability, linkages and product quality**
 - ✓ **Increased employment share and the degree of externalities.**

ISMED and Transmission Effects

(Economic Growth)

- ❖ **Transmission effects are the externalities generated through investment in the transformation process leading to economic growth.**
 - **Increased competition among firms**
 - **Increased technological learning**
 - **Increased growth rate per capita income**

The Expected Outcome of the ISMED-Model



Source: Uzor, (2009)

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Application of ISMED Model

- ❖ **The ISMED model is not strictly for Nigerian SMEs only or restricted to any particular industrial sector**
- ❖ **The Model is specifically designed for the development of SMEs in Africa.**
- ❖ **The ISMED model is effective in the sectors where a country has comparative advantage.**
- ❖ **For African economies that have comparative advantage in agricultural production, the model will assist governments and private firms in the region in the process of rehabilitating and developing some selected agro-industrial processing.**
- ❖ **The model serves as basic instrument aimed at promoting value addition and integration of the region into the global market.**

The ISMED Model and Agro-Industrial Processing in Enugu State, Nigeria

| Stages | Activities | Realisation Processes |
|---|--|--|
| <p>❖ Public policy</p> <ul style="list-style-type: none"> ▪ Impact of Agro-processing: income and employment ▪ Risks: food safety and environment sustainability | <p>➤ Promoting agro-processing firms</p> | <ul style="list-style-type: none"> ✓ Land use reform ✓ Policy Instruments |
| <p>❖ Enugu Agro-industrial processing</p> <ul style="list-style-type: none"> ▪ Oil Palm Products ▪ Rice milling ▪ Wood products ▪ Fruit/Vegetable products | <p>➤ Firms activities:</p> <ul style="list-style-type: none"> • raw material supply • processing • marketing | <ul style="list-style-type: none"> ✓ Identifying constraints along the value chains: raw material production, processing, packaging and supply to the market. ✓ Promoting competition along the value chains |
| <p>❖ Institutional Framework</p> | <p>➤ Land rights and ownership Contract enforcement</p> | <ul style="list-style-type: none"> ✓ The social contract between farmers and state in order to boost agricultural production |

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The ISMED Model and Agro-Industrial Processing in Enugu State, Nigeria

| Stages | Activities | Realisation Processes |
|-------------------------|--|---|
| ❖ Investment Strategies | <ul style="list-style-type: none"> ➤ Promoting investment along the entire value chains ➤ Promoting basic technology and access to modern equipment <p>▪ Public</p> | <ul style="list-style-type: none"> ✓ Targeted investment promotion programme for potential local and foreign investors ✓ Investment in rural infrastructure ✓ Facilitating Investors' access to finance and technical support services. ✓ Investment in technical education and skill development |
| | <ul style="list-style-type: none"> ➤ Increased FDI in Agro industry ➤ Increased investment in commercial farming ➤ Increased Investment technology and skill development <p>▪ Private</p> | <ul style="list-style-type: none"> ✓ Identifying how FDI can impact domestic investment and vice versa in agro- industry ✓ Identifying particular needs of the small and medium-scale agri-business enterprises in their investment decisions |
| | <ul style="list-style-type: none"> ➤ Technical support in investment <p>▪ Donors</p> | <ul style="list-style-type: none"> ✓ Promoting capacity building in investment, trade and policy dialogue |

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Public-Private Partnership in Upgrading the Oil palm and Fruit/Vegetable Production in Enugu State of Nigeria

(The ISMED Model Approach).

| Stages | Activity | Description |
|-----------|---|---|
| ❖ Finance | Public ➤ Improving famers' access credit | ✓ Access to CBN ACGSF <i>(guarantee of raw material supply)</i> |
| | ➤ Review of commercial bank interest rates | ✓ Increased access to bank credit and loans mobilisation of the domestic capital |
| | Private ➤ Strengthen the capital markets | <i>(firm financial viability)</i> |
| | Donors ➤ Supporting feasibility studies and initial financial assistance to reduce the sunk cost. | ✓ Foreign Assistance for agricultural development. <i>(guarantee of raw material supply)</i> |
| | | ✓ Grants to firms for capability improvement <i>(technology sourcing)</i> |

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Public-Private Partnership in Upgrading the Oil palm and Fruit/Vegetable Production in Enugu State of Nigeria (The ISMED Model Approach).

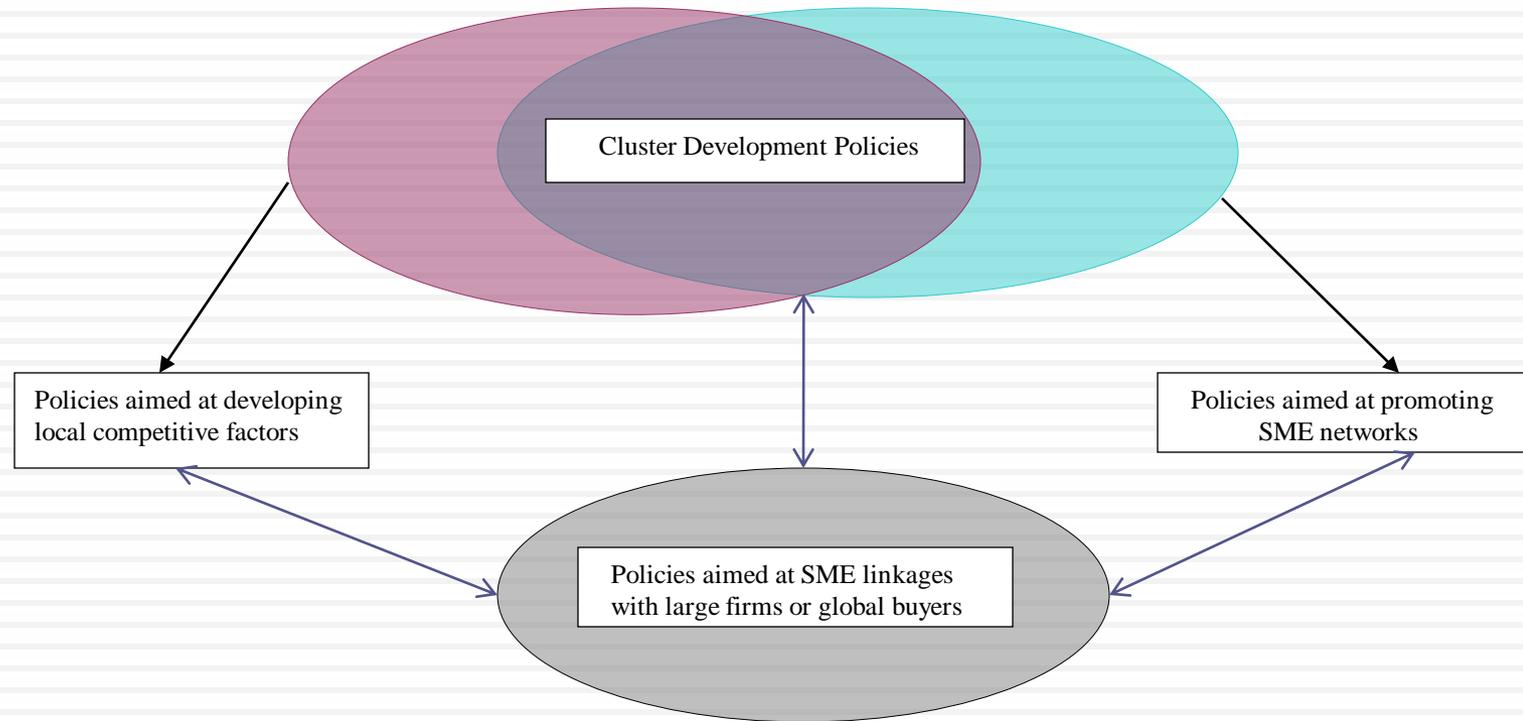
| Stages | Activity | Realisation Processes |
|--|---|---|
| ❖ Education (Research and Training) | <ul style="list-style-type: none">➤ Promoting Capacity building in research institutions and skill development centres.➤ Promoting technical education.➤ Promoting linkages among Institutions. | <ul style="list-style-type: none">✓ Training in industrial processing and machine operation and maintenance.✓ Training in artisanal (vocational) skills. |

Public-Private Partnership in Upgrading the Oil palm and Fruit/Vegetable Production in Enugu State of Nigeria (The ISMED Model Approach).

| Stages | Activity | Description |
|---------------|---|--|
| ❖ Marketing | ➤ Marketing channels | ✓ Identifying Consumers ✓ Product quality ✓ Identifying Niches ✓ Networking |
| ❖ Environment | ❖ Networking ➤ Integrating the environmental agencies forestry department and waste disposal firms in the value chains | ✓ Environmental impact assessments programmes |

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Dynamic Industrial Policy Strategy for the Promotion of Enterprise Clusters, Networks and Innovation in Nigeria



Source: Pietrobelli and Rabellotti, (2004) and Uzor, (2009).

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Policy Classifications

General Policy Measures

Sector Specific Policy Measures

*SME
Clusters*

- ❖ Identify the cultural norms and social cohesion existing in the cluster
- ❖ Recognising the impact of agglomeration effects
- ❖ Identifying how to enhance productivity growth
- ❖ Promoting collective efficiency
- ❖ Developing long term strategy on how to establish links with large firms/external buyers

- ✓ Promoting technical education at grassroots level and establishing skill improvement Centres
- ✓ Linking the Clusters to local universities and polytechnic
- ✓ Develop Cluster related curriculum with emphasis on dynamic factors
- ✓ Linking the Clusters to local credit institutions for easy access to short term credits.
- ✓ Integration of sub-sectoral and business associations in cluster development processes

*SME
Networks*

- ❖ Promoting social capital and linkages
- ❖ Fostering a learning networks to improve standards
- ❖ The mechanisms that strengthen interactions and enforcement of agreements

- ✓ Targeting interdependent and coherent groups
- ✓ Promoting opportunities for joint projects
- ✓ Strengthen the commercial law
- ✓ Promoting Programmes aimed at increasing the capacity of firms the to learn and innovat

Policy Classifications

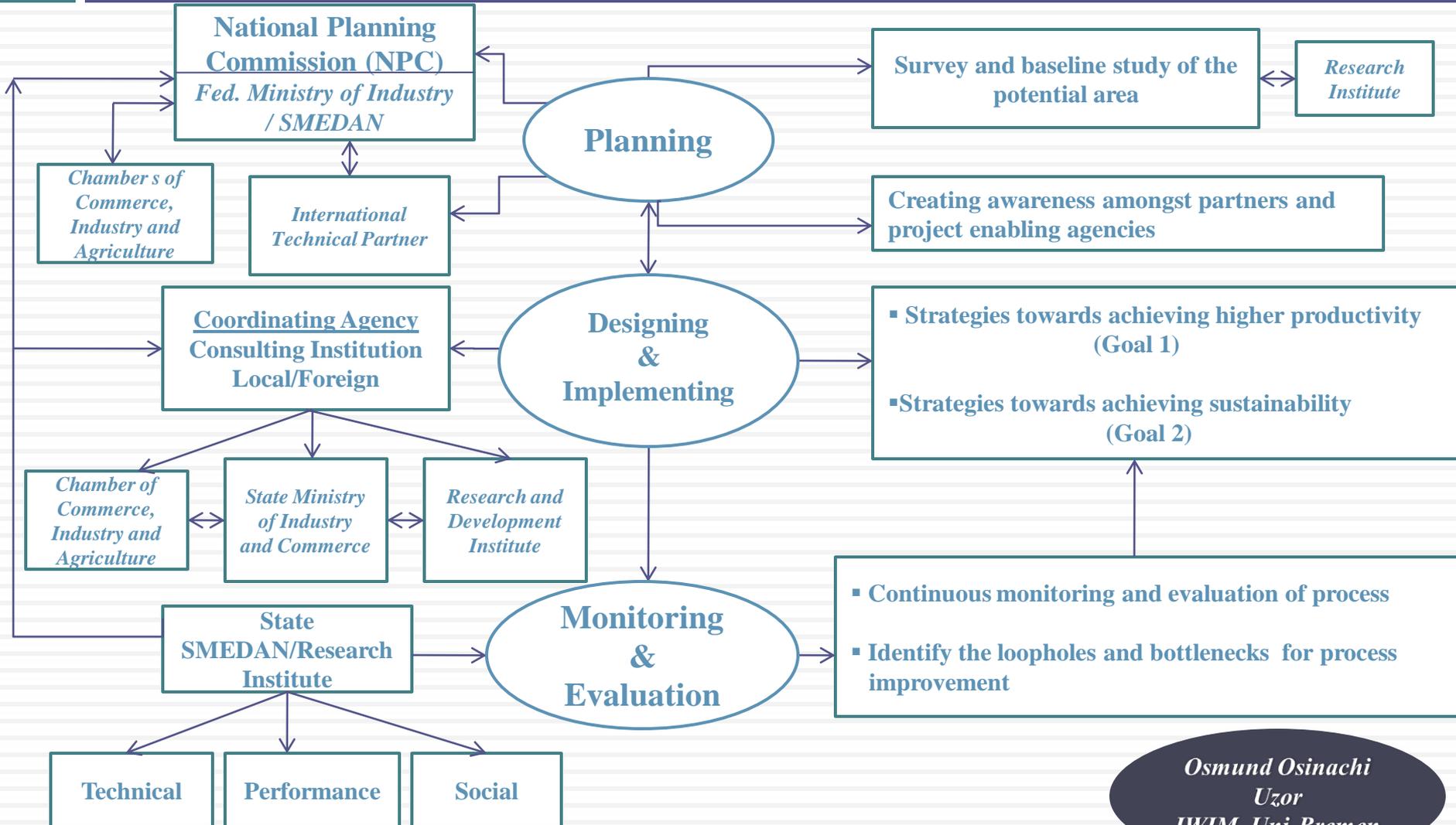
General Policy Measures

Sector Specific Policy Measures

- Innovation in
SMEs*
- ❖ Macroeconomic level strategy should focus on price of inputs such as capital and labour
 - ❖ Microeconomic level: conditions that promote enterprises' innovative activities
 - ❖ Meso-level: Identify how clustering and networking can foster technological and social change

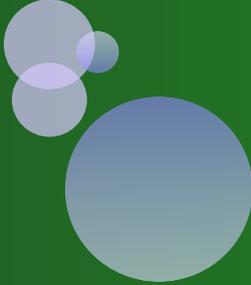
- ✓ Identify sectors with very weak institutional capabilities
 - Investment in basic technology infrastructure
 - Promote education system that encourage technical knowledge
- ✓ Identify the sectors with relatively stronger institutional capabilities
 - Promoting articulated entrepreneurial culture

Public-Private Partnership in the Promotion of Nigerian Enterprise Clusters, Networks and Innovation *(The ISMED model approach)*



Summary and Discussion

- ❖ **ISMED model seeks to restructure and strengthen the small and medium scale enterprises in Nigeria and countries in Africa as well**
- ❖ **The central research outcomes are:**
 - **improving the competitive factors such as human capital, technological capability and linkages are the most dynamic form of promoting SMEs in Nigeria**
 - **Improving domestic investment supported by FDI will stimulate SME growth in terms of transformation and productivity growth.**
 - **The growth in SMEs will lead to general economic growth in Nigeria**

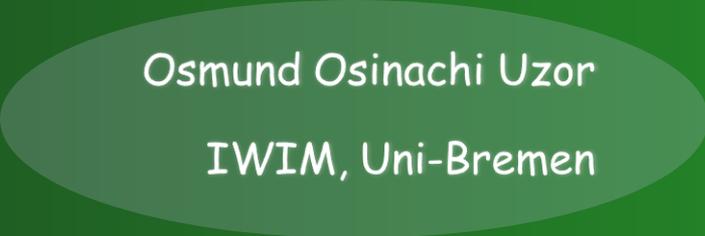


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You**



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