



THE STATE AS A DRIVER OF INNOVATION – LED GROWTH

الدولة كمحرك للنمو المؤسس علي الابتكار

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A DEVELOPMENTAL STATE AND ITS INDUSTRIAL POLICY

- THE STATE MUST LEAD THE PROCESS OF INDUSTRIAL DEVELOPMENT BY DEVELOPING STRATEGIES FOR TECHNOLOGICAL ADVANCE IN PRIORITY AREAS .
- AND DESIGN A NATIONAL INNOVATION STRATEGY FOR INCLUSIVE , SUSTAINABLE ECONOMIC GROWTH



INNOVATION IS ONE OF THE MAIN FORCES WHICH SUPPORTS ECONOMIC TRANSFORMATION

GOVERNMENTS OF DEVELOPING COUNTRIES WHICH SUSTAIN ENTERPRISE INNOVATION OF
PRODUCTS AND PROCESSES WILL TRANSFORM THEIR ECONOMIES INTO DEVELOPED ONE .

INNOVATION-LED GROWTH POLICIES TO SUPPORT THE KNOWLEDGE ECONOMY

- GOVERNMENT SPENDING ON AREAS THAT INCREASE NATION CAPACITY FOR INNOVATION : R&D , INFRASTRUCTURE , LABOR SKILLS , DIRECT AND INDIRECT SUPPORT FOR SPECIFIC TECHNOLOGIES AND FIRMS . INVESTMENTS INTO PROGRAMMES THAT INCREASE PRODUCTIVITY .
- SYSTEMS OF INNOVATION : THE NETWORK OF INSTITUTIONS IN THE PUBLIC AND PRIVATE SECTORS WHOSE ACTIVITIES AND INTERACTIONS INITIATE , IMPORT , MODIFY , ADAPT AND DIFFUSE NEW TECHNOLOGIES .



TARGETING THE SMALL and MID SIZED GROWTH-ORIENTED
TECHNOLOGY-DRIVEN FIRMS .
MARKETING & FISCAL POLICY [tax incentives] and OTHER
INSTRUMENTS TO INDUCE INNOVATIVENESS .

The background is a dark blue gradient with faint technical graphics. On the right side, there are several concentric circles and arcs, some with tick marks and numbers (100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210) along their perimeters, resembling a circular scale or a gauge. There are also some dashed lines and arrows pointing in various directions, suggesting a complex system or process.

SYSTEMS OF INNOVATION [SECTORIAL , REGIONAL , NATIONAL] REQUIRE :

THE DYNAMIC LINKS BETWEEN DIFFERENT ACTORS [FIRMS , FINANCIAL INSTITUTIONS , PUBLIC SECTOR FUNDS , RESEARCH CENTERS , EDUCATION INSTITUTIONSETC.] AS WELL AS HORIZONTAL LINKS WITHIN ORGANIZATIONS AND INSTITUTIONS .

TO CREATE A PLATFORM FOR ENGAGING A BROAD SECTOR OF ACTORS TO SUPPORT THE CREATION OF A KNOWLEDGE-BASED ECONOMY AND INNOVATION-LED GROWTH

- IMPACT ANALYSES , TECHNOLOGY COMMERCIALISATION AND UNIVERSITY/PRIVATE SECTOR PARTNERSHIPS PROGRAMS TO STRENGTHEN THE ELEMENTS OF THE INNOVATION ECOSYSTEM

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THE NEW INDUSTRIAL POLICY TO REBALANCE THE ECONOMY AWAY FROM NON VALUE-ADDED ACTIVITIES TOWARDS THE “ REAL ECONOMY “ .

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STATE INVESTS IN AREAS THAT THE PRIVATE SECTOR WOULD NOT INVEST [NO CROWDING]

PUBLIC VENTURE CAPITAL IS DIFFERENT FROM PRIVATE VENTURE CAPITAL SINCE IT IS WILLING TO INVEST IN AREAS WITH HIGHER RISK .

THE PROBLEM IS NOT
ABOUT PUBLIC VS. PRIVATE

BUT ABOUT THE ROLE OF THE STATE IN
THE ECONOMY AWAY FROM IDEOLOGY
AND TOWARDS PRACTICAL THINKING .

- 1. GOVERNMENT TO ENVISION A DIRECTION FOR TECHNOLOGICAL CHANGE AND INVEST IN THAT DIRECTION
- 2. ABANDONING THE SHORT-SIGHTED WAY PUBLIC SPENDING IS EVALUATED . IT SHOULD BE MEASURED BY ITS PUSHING MARKETS IN NEW AREAS .
- 3. ALLOWING PUBLIC ORGANIZATIONS TO EXPERIMENT , LEARN AND EVEN FAIL .
- 4. WAYS FOR GOVERNMENT AND TAXPAYERS TO REAP SOME OF THE REWARDS .

The background is a dark blue gradient with faint, light blue technical graphics. On the right side, there are several circular gauges or dials with numerical scales (e.g., 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210) and arrows. There are also some dashed lines and smaller circular elements scattered across the background.

RETURNS EARNED ACROSS SECTORS AND TECHNOLOGIES FUNDED
BY THE STATE SHOULD BE PAID INTO A “ NATIONAL INNOVATION
FUND “.

WHICH THE GOVERNMENT CAN USE TO FUND FUTURE INNOVATIONS.

The background is a dark blue gradient with faint, light blue technical graphics. On the right side, there are several concentric circles and arcs, some with tick marks and numbers (100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220) along their perimeters, resembling a circular scale or a gauge. There are also some dashed lines and arrows pointing in various directions, suggesting a technical or scientific theme.

AN INCLUSIVE APPROACH TO INNOVATION-LED GROWTH
WHEREBY THE STATE RETAINS A DEGREE OF OWNERSHIP IN THE
INTELLECTUAL PROPERTY CREATED FROM ITS INVESTMENTS
WHICH RETURNS RE-INVESTED INTO NEW-GROWTH –GENERATING
PROJECTS .

SINCE THE STATE IS BURDUNED WITH THE COSTS OF INNOVATION WHILE REWARDS ARE
PRIVATISED , REDUCING THE ABILITY OF THE STATE TO FINANCE FUTURE PROJECTS .

A SUSTAINABLE INDUSTRIAL SYSTEM

- WILL MEET TARGETS FOR REDUCING RESOURCE CONSUMPTION & CO2 GENERATION WHILST DOUBLING PRODUCTION OUTPUT OF MANUFACTURING INDUSTRIES . THIS REQUIRES A MEASURED APPROACH TOWARDS SUSTAINABLE MANUFACTURING THAT CONSIDERS OPERATIONS AND BEHAVIORS ALONG SIDE TECHNOLOGICAL DEVELOPMENT RELATED TO EFFICIENT USAGE OF ENERGY , MATERIAL AND WATER RESOURCES .

BUILDING A SUSTAINABLE INDUSTRIAL SYSTEM REQUIRES TECHNOLOGIES FOR :

- RECYCLABLE MATERIALS
ADVANCED WASTE MANAGEMENT
BETTER AGRICULTURAL PRACTICES
STRONGER ENERGY EFFICIENCY ACROSS SECTORS
WATER DESALINATION INFRASTRUCTURE
ALTERNATIVE FUELS AND ELECTRIC CARS
ADVANCED MANUFACTURING
NEW MATERIALS
NEW GENERATION IT
BIOTECHNOLOGY

CIRCULAR APPROACH TO ECONOMIC DEVELOPMENT

The background features a dark blue gradient with faint, light blue circular patterns and a scale on the right side. The scale is a semi-circle with numbers from 0 to 210 in increments of 10, and arrows pointing inwards. There are also several concentric circles and dashed lines scattered across the background.

COMPETITIVE ADVANTAGE OF THE FUTURE DEPENDS ON EFFECTIVE RESOURCE MANAGEMENT AS WELL AS REDUCED WASTE AND POLLUTION .
CLEAN TECHNOLOGIES AS PART OF A STRATEGIC VISION AND LONG-TERM COMMITMENT TO ECONOMIC GROWTH

TO ACHIEVE THE 17 SUSTAINABLE GOALS 2015-2030

And the Egyptian 10 goals of Vision 2030

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| 1.economic development | 2.energy |
| 3.knowledge and innovation | |
| 4.transparency&efficiency of government institutions | 6.health |
| 5.socialjustice | 8.culture |
| 7.education and training | |
| 9.environment | 10.urban development |

