

# ADLI and Future Directions for Industrial Development

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## Agricultural Development Led Industrialization

### **Ethiopia's ADLI** (my definition):

“The development strategy that aims to achieve initial industrialization through robust agricultural growth and close linkage between the agricultural and the industrial sector.”

*An Economic Development Strategy for Ethiopia, Feb.1994*

*Industrial Development Strategy, 2002*

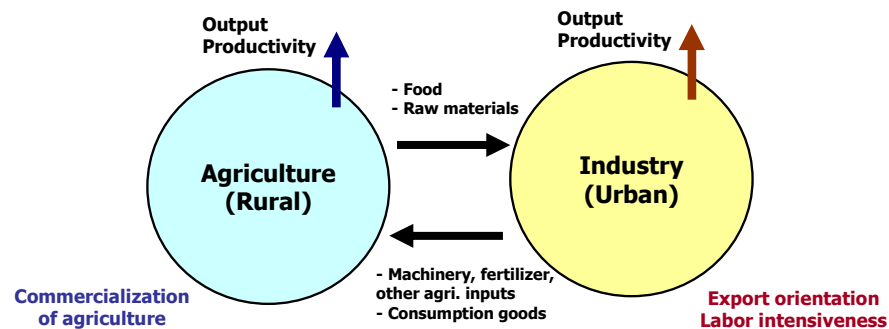
*Sustainable Development and Poverty Reduction Program (SDPRP), 2002/03-2004/05*

*A Plan for Accelerated and Sustained Development to End Poverty (PASDEP), 2005/06-2009/10*



## Core ADLI

- Increase agricultural output and productivity
- Increase industrial output and productivity
- Close input-output linkage between the two sectors



## ADLI: Motivation, Flexibility, Time Scope

- Poor, landlocked agrarian society → Peasants and pastoralists should be the growth engine; maximum use of abundant resources (labor & land), creation of commercial farmers.
- ADLI is an evolving strategy which can respond to changing circumstances and ideas.  
(1994 Strategy → SDPRP → PASDEP → PASDEP II)
- Initial stage only:  
“Thus if ADLI strategy is successfully applied it will be changed to industry led development strategy”  
(IDS 2002, Eng p.8).



## Additional Requirements of ADLI (from IDS 2002)

- Leading role of private sector
- ADLI link (use of domestic materials)
- Export orientation
- Focus on labor-intensive industries
- Proper roles of local and FDI firms
- Strong state guidance
- Mobilization of all social forces



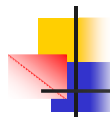
## Formulation of ADLI

### **An Economic Dev. Strategy for Ethiopia (1994)**

“...productivity improvement of smallholder agriculture and industrialization based on utilization of domestic raw materials with labor-intensive technology. The strategy is akin to what is known ... as ADLI, framed into the Ethiopian context.” (p.8)

#### **Two-pronged approach:**

- Smallholder agriculture – better agronomic practices, more labor use, research & extension, technology transfer, rural infrastructure
- Extensive mechanized agriculture and intensive farming – efficient land allocation, labor supply, health and road for new lands, research and training, quality, marketing, etc.



## Implementation of ADLI #1

**SDPRP 2002/03-2004/05:**

### **Supply-side agricultural support**

- (i) Extension services
- (ii) Training of extension agents and farmers
- (iii) Water harvesting and irrigation
- (iv) Improved marketing
- (v) Restructuring peasant cooperatives
- (vi) Supporting micro-finance institutions
- Output volatility due to weather factor: crop failure (2002/03) followed by recovery (2003/04)
- No clear sign of rising productivity or structural change
- Limitation on exclusively rural focus?



## Implementation of ADLI #2

**PASDEP 2005/06-2009/10 (Enhanced ADLI):**

- Strong emphasis on growth acceleration
- Scope widened to include industry and urban sectors
- Two added thrusts: *commercialization of agriculture* and *private sector development* (Eng p.46)
- High growth achieved, but how much was due to policy? (weather, building boom, global shocks...)
- Productivity and structural shifts?

➔ Performance review and innovation for next PASDEP?



## Recent Economic Performance

	(Ethiopian year)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	(Western year)	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Real GDP growth (%)		5.2	6.1	8.3	1.5	-2.2	13.6	11.8	10.8	11.1	11.3
Nominal GDP (millions of Birr)		58,789	66,648	68,027	66,557	73,432	86,661	106,473	131,641	171,834	245,585
Nominal GDP (millions of USD)		7,828	8,188	9,167	7,794	8,559	10,042	12,306	15,164	19,539	27,939
GDP per capita (USD)		129	131	127	118	126	143	171	205	257	357
Sector share (% of GDP) <sup>1/</sup>											
Agriculture		51.2	49.8	50.9	49.1	44.9	47.0	47.4	47.1	46.3	44.6
Industry		12.4	12.4	12.1	12.9	14.0	14.0	13.6	13.4	13.3	13.1
Service		37.2	38.7	38.0	38.6	41.7	39.7	39.7	40.4	41.4	43.4
External relations (% of GDP)											
Export		11.6	12.0	12.0	12.6	13.3	14.9	15.1	13.8	12.7	11.8
Import		24.0	23.9	23.7	26.6	27.4	31.6	35.5	36.5	32.1	26.9
Trade deficit (export - import)		-12.4	-11.9	-11.7	-14.0	-14.1	-16.7	-20.4	-22.7	-19.4	-15.1
Total trade (export + import)		35.6	35.9	35.7	39.2	40.7	46.5	50.6	50.3	44.8	38.7
FDI (approval, millions of Birr)		1,080	1,627	2,923	1,474	3,369	7,205	15,405	19,980	46,949	92,249
(approval, % of GDP)		1.8	2.4	4.3	2.2	4.6	8.3	14.5	15.2	27.3	37.6
Population (million)		60.8	62.9	64.4	66.3	68.2	70.1	72.1	74.1	76.1	78.2
Population in rural area (%)		85.5	85.3	85.1	84.9	84.7	84.4	84.2	84.0	83.8	82.9
Population in poverty (%)		-	41.9	-	-	-	-	38.7	-	-	-
Exchange rate (Birr/USD, period average)		7.51	8.14	8.33	8.54	8.58	8.63	8.65	8.68	8.79	8.79

Sources: Ministry of Finance and Economic Development, National Bank of Ethiopia, and Ethiopian Investment Agency.  
<sup>1/</sup> Do not add up to 100% due to estimate errors of intermediary margins of financial institutions (service sector).



## Remarks on the Evaluation of Current PASDEP

- Review of macro, sectoral, poverty results is important, but it does not directly test the validity of ADLI as an industrialization strategy (other factors, causality?)
- Cause of recent overheating and inflation?
  - { **WB/IMF:** expansionary fiscal & monetary policies, exchange rate overvaluation, supply and global shocks, etc.
  - { **Alternative hypothesis:** excessive injection of foreign funds (FDI, ODA, remittances) relative to GDP
- Distinguishing two kinds of poverty
  - { **Traditional** – road & water access, low technology, diseases
  - { **Market/globalization driven** – inflation, asset bubbles, urban migration and unemployment, etc.



## Foreign Fund-Driven Overheating and Bubble

Many countries faced this problem around 2005-08:

**Large export earnings from extractive resources (“Dutch Disease”)**

Russia, Kazakhstan, Mongolia, UK, Nigeria, Zambia, South Africa, Botswana, Mauritania, Angola...

**Other large inflows (manuf. exports, remittances, FDI, ODA, bank loans, securities, etc.)**

China, Vietnam, UAE, UK, (Ethiopia?)

Large inflow (up to 20-30% GDP)

→ Increase in money supply & credit

→ Consumption & construction booms, asset bubbles, inflation, trade deficit, currency overvaluation, (rise in foreign reserves: not observed in Ethiopia)



## Issues for the Next Round of ADLI Implementation

- Difficulty of Core ADLI
- Broadening policy scope
- Agricultural strategy in current PASDEP
- Industrialization strategy in current PASDEP
- Methodology



## Difficulty of Core ADLI

- East Asia's high performers did not rely exclusively or even mainly on Core ADLI, although agriculture sometimes played positive roles in industrialization.
- No example in the rest of the world either.
- Productivity breakthrough and commercialization of scattered smallholder farmers is extremely difficult.
- In Ethiopia, leather industry is building a core ADLI link successfully. But its impact may not be large enough to lead and sustain overall industrialization.



## East Asian Experiences

### **Agriculture generated foreign exchange and/or fiscal revenue for industrialization (A→I)**

- Meiji Japan (late 19c to early 20c)—silk and tea exports paying for machinery imports; land tax.
- Taiwan up to 1960s: rice and sugar were taxed and price controlled.
- Thailand up to 1980s (Newly Agro-industrializing Country: NAIC)—processed food export (frozen chicken, canned food, shrimp) and rice export tax; generating F/X for import substitution industries.



## East Asia (cont.)

### **Agriculture generated some revenues first, but full-scale industrialization was FDI-led.**

- Thailand since late 1980s (cars, electronics).
- Malaysia—initially rubber, tin, timber exports; since late 1980s FDI-led industrialization in electronics.
- Vietnam—Liberalization stimulated rice and fishery exports; but industrialization since 1990s was essentially FDI-driven.

### **Rural-urban labor migration under rapid industrialization**

- Observed almost everywhere in East Asia.



## East Asia (cont.)

### **Agriculture serving as a shock absorber**

- Japan after war defeat (late 1940s)—food shortage and high unemployment.
- Vietnam in early 1990s—laid-off workers from SOE privatization.

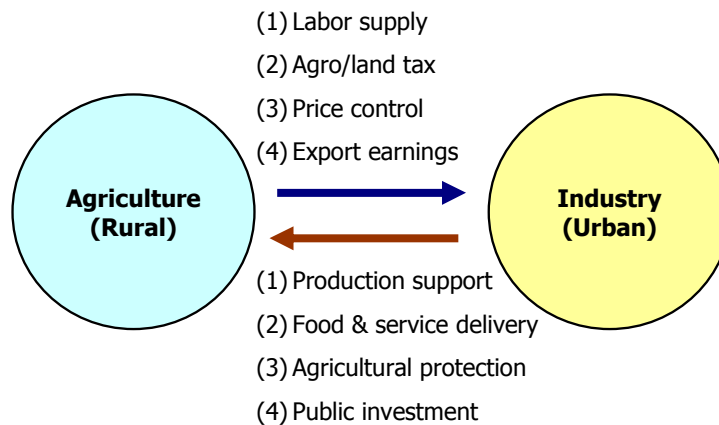
### **Agriculture receiving transfer from industry/urban sector (I→A)**

- Post WW2 Japan—lagging agriculture: transfer from urban to rural sectors for political stability.
- S.Korea 1960s-70s—Saemaul Movement: agri. support for productivity improvement and better rural life.



## Links and Transfers between Agriculture and Industry

Besides direct input-output links (Core ADLI), the two sectors may have the following links, which may occur directly or through fiscal or financial systems:



## Broadening of ADLI Scope

- Core ADLI is possible, but that alone may not be enough for achieving desired high growth.
- While keeping Core ADLI, other channels should be explored to:
  - (1) Accelerate agriculture
  - (2) Accelerate industry
  - (3) Build various links between two sectors (not necessarily input-output links)
- Industrialization and agricultural/rural development may be pursued jointly or separately.
- Export orientation, use of domestic resources, and labor-intensiveness should be applied flexibly.



## Broadening the Policy Space

- **Core ADLI** (original) – strong input-output linkage between two sectors
- **Enhanced ADLI** (current PASDEP) – for accelerated growth, add commercialization of agriculture and PSD
- **Further broadening** – keep Core ADLI, but explore more channels for agricultural and industrial growth, with or without sectoral linkage. Apply strategic requirements flexibly for each case (export orientation, labor-intensiveness, use of domestic resources).



## Agricultural Development Strategy in Current PASDEP

### **A long section (Eng. 42 pp.) with broad scope**

- Is policy capacity sufficient? How does MoARD implement and monitor so many policies?

### **Many numerical targets for each crop and action every year (similar to Leather M/P)**

- Re-organize targets and measures strategically.
- Limit target crops and areas sharply and draft M/P & A/P for each: “agriculture” or “food processing” is too broad



## Rethinking the Strategy for Small Farmers

- Two pillars: **supply-side support** and **quality-of-life support** (cf. Rural Life Improvement Movement)
- Multiple time scopes:
  - Rural life improvement & MDGs – S-Medium term
  - Productivity & commercialization – Long-term
  - Rural infrastructure, rural industrialization
- Broaden policy menu to include “closer” targets:
  - Produce for nearby/local markets
  - Tourism
  - Specialties (processed agro products, handicrafts)
  - One-Village-One-Product
  - Michi-no-Eki (roadside stores to sell local products)



## Industrialization Strategy in Current PASDEP

### **A short section for industry (Eng. 12pp.)**

- ➔ Summarizes IDS and existing M/Ps; plus export strategy, PSD, PPP.
- ➔ New PASDEP should discuss key issues & strategies in target sectors (incl. kaizen, engineering capacity) as interface between IDS and individual M/Ps.

### **Food processing – sugar & flowers only?**

- ➔ With more M/Ps and TA available, new PASDEP should contain more sectors/crops and strategic details.



## Final Remarks on PASDEP Methodology

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- The role of PASDEP in policy formulation process (esp. agriculture and industry)
- MoFED-MoARD-MoTI coordination in drafting PASDEP
- Policy capacity vs. scope broadening:
  - { - Agriculture: start with a large number of crops and targets
  - { - Industry: start with selected sectors, scale up later
- ➔ Broaden policy scope but reduce targets under limited budget and human resource
- Customer-driven approach in TVET and technology transfer