



Building Adaptive Capacity in Less Developed Regions

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Farmers building a dam as part of the government emergency work front program



Farmers supplement their diets with cactus plants.

Adaptive capacity

The ability of a system to adjust to climate change (including climate variability and extremes), to moderate potential damages, to take advantage of opportunities, or to cope with the consequences

The set of resources, and the ability to employ those resources, that are prerequisites to adaptation (Nelson, Adger and Brown 2007)



Determinant:

Encompasses:

Human capital

Knowledge (scientific, "local", technical, political), education levels, health, individual risk perception, labor

Information & Technology

Communication networks, freedom of expression, technology transfer and data exchange, innovation capacity, early warning systems, technological relevance

Material resources and infrastructure

Transport, water infrastructure, buildings, sanitation, energy supply and management, environmental quality

Organization and social capital

State-civil society relations, local coping networks, social mobilization, density of institutional relationships

Political capital

Modes of governance, leadership legitimacy, participation, decentralization, decision and management capacity, sovereignty

Wealth & financial capital

Income and wealth distribution, economic marginalization, accessibility and availability of financial instruments (insurance, credit), fiscal incentives for risk management

Institutions and entitlements

Informal and formal rules for resource conservation, risk management, regional planning, participation, information dissemination, technological innovation, property rights and risk sharing mechanisms

The Critical Relationship

- In less developing regions there is a direct relationship between building adaptive capacity and development
- ...or in other words, many of the causes of vulnerability are connected to development deficits...

Development

About solving perceived social problems

- Poverty → Economic growth (GDP)
- Inequality → Human development (HDI)
- Environmental Degradation → Sustainable development (SD)

A new paradigm?

Climate impacts



risk management

Adaptive Development

Why do we need it?

- Protecting resources, ensuring redistribution, and promoting growth in the wake of climate changes may well overwhelm the capacity of many governments, but especially those of less developed countries, to manage risk and continue to develop economically and socially

Adaptive Development



Adaptive development is needed because policies must take into account risks rather than just poverty, equity, scarcity, or degradation.

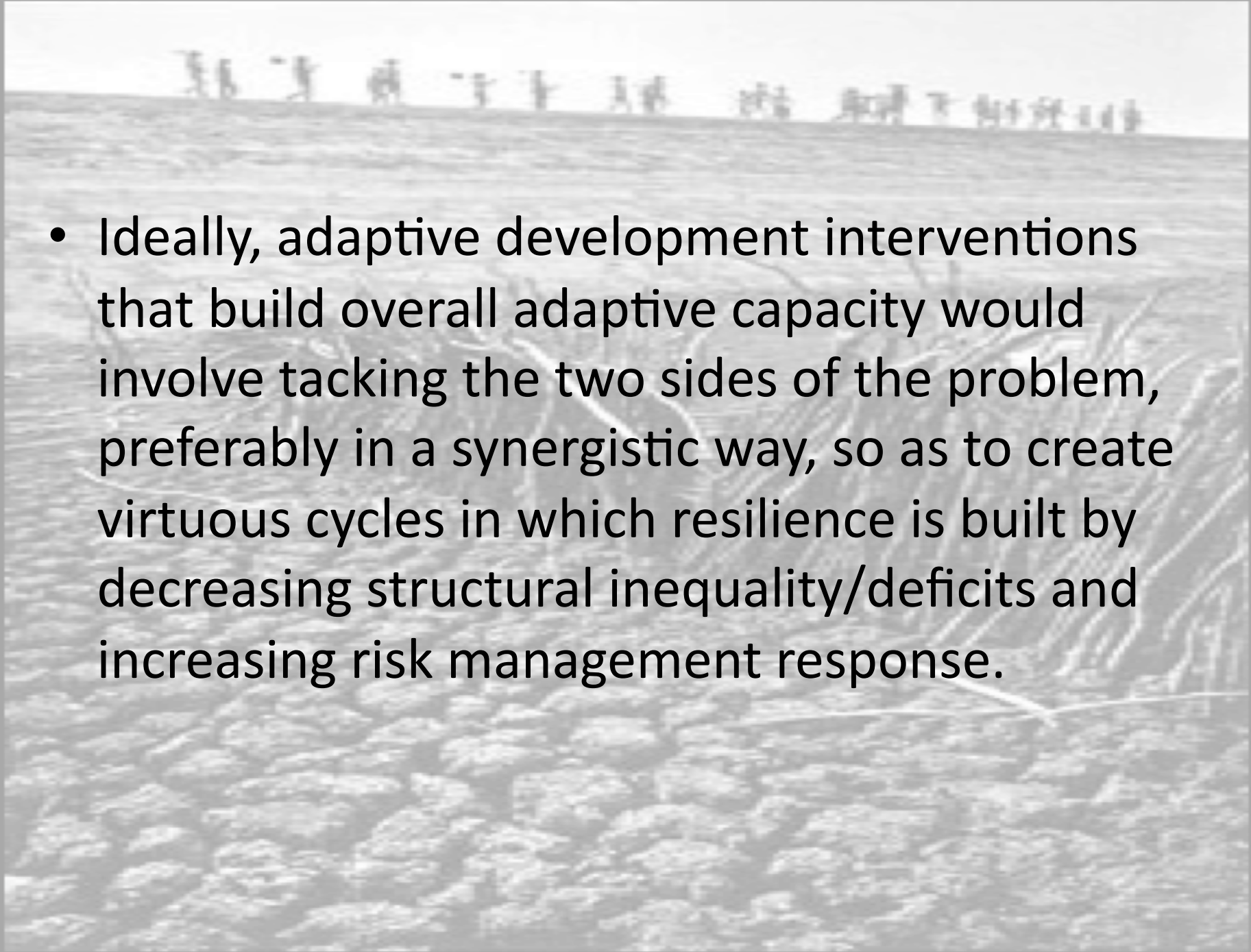
Adaptive development

- Theoretically provides a robust basis upon which to elaborate strategies aimed to improve the life chances of the poor and the long term sustainability of ecosystems.
- From a policy point of view, there is a need to understand the dynamics of adaptive action, that is, how the practice of implementing risk management interplays with existing/traditional development policy negatively and positively.

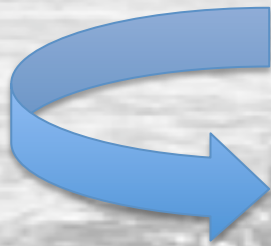
A grayscale background image showing a wide, flat field, possibly a coastal plain or a large agricultural field. In the distance, a line of people or structures is visible against a light sky. The overall tone is somber and desaturated.

Adaptive Capacity

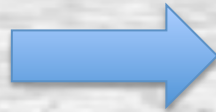
- Generic: interventions to address structural deficit (income, education, health, safety, political access, etc.)
- Specific: risk management to address specific climate-related stressors (drought response, disaster relief, climate information, infrastructure, etc)

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- Ideally, adaptive development interventions that build overall adaptive capacity would involve tackling the two sides of the problem, preferably in a synergistic way, so as to create virtuous cycles in which resilience is built by decreasing structural inequality/deficits and increasing risk management response.

generic



specific



Ability to benefit from
Specific AC may be
contingent to minimum
generic AC



Higher AC

generic



specific



Overreliance on
cash transfers may
crowd
out other solutions,
result in rigidity (lock in)
and complacency



Lower AC



NE Brazil

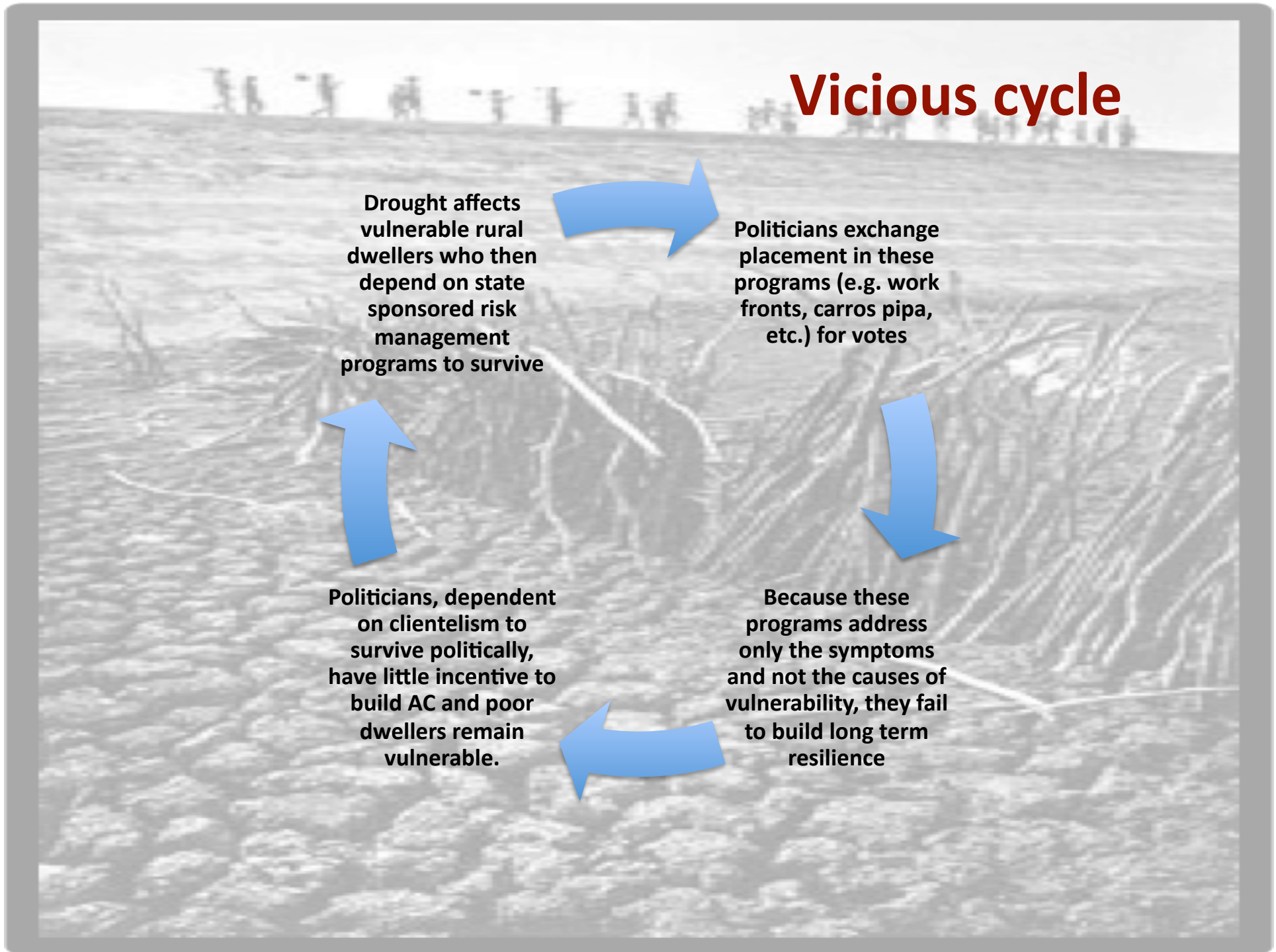
Vicious cycle

Drought affects vulnerable rural dwellers who then depend on state sponsored risk management programs to survive

Politicians exchange placement in these programs (e.g. work fronts, carros pipa, etc.) for votes

Politicians, dependent on clientelism to survive politically, have little incentive to build AC and poor dwellers remain vulnerable.

Because these programs address only the symptoms and not the causes of vulnerability, they fail to build long term resilience



Virtuous Cycle

