

Beyond Project Cycle Management. Rethinking Development Project Design

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Abstract

The standard Project Cycle Management (PCM) and Logical Framework (LF) were created fifty years ago and applied since then to simple development cooperation projects around defined diagnoses with discrete interventions. Nowadays development is theorized as a complex adaptive system embedded in a multi-dimensional web of interconnections between and within contexts and specificities, through historical and social connections. This new conceptualization of development implies the interconnecting principles of (eco-system and social-system) resilience, adaptation, equity, access, transformative empowerment, community self-determination and inter-sectoral collaboration, by encompassing the environmental, social, economic, political and cultural dimensions.

Nevertheless, the need for the introduction of an up-to-date approach to project design remains unfulfilled. As far as aid effectiveness and results-based management are emphasised, PCM and LF continue to be commonly used as practical tools.

In this study, after various critical observations about the logic of PCM, some complementary and alternative approaches to project design, implementation and evaluation are proposed.

keywords: Project Cycle Management, Logical Framework, planning, development cooperation Input-Output Analysis, Cost-Benefit Analysis, Complexity, non-linearity, Real options.

1. Some epistemological considerations

The term “planning” has been used very loosely in economic literature, and there is no agreement among economists with regard to its meaning. Any type of state intervention in economic affairs has also been treated as planning. But the state can intervene even without making any defined plan. What then is planning? According to Jhingan, “planning is a technique, a means to an end being the realization of certain pre-determined and well-defined aims and objectives laid down by a planning authority”¹.

In practice, planning and project making are the modern human attitude to

¹ M. L. Jhingan (2004), *The Economics of Development and Planning*, 37th edition, Vrinda, Publ. Ltd, Delhi, p.488.

thinking about the future and contributing to create the future state of the world. It reflects the modern philosophical idea that there is really no absolute limit to human possibilities to transform the world, through ideas and emerging processes that will change the world for the better by promoting progress and development. In brief, planning and project making are conceived as an instrument of change and liberation.

Developing a critical approach to development planning and project making requires, first of all, recognizing the central importance of ideology in contemporary development culture. The universality of the development discourse is tautologically unfounded and ungrounded: it is the universal that is the specific way to perceiving reality and "truth" according to the European metaphysical rationalist and empiricist traditions.

The assumption of an external validity of such a universal specificity extended to the world as a whole, that is what Paul Feyerabend would have called the Western myth or superstition², and to consider it as liberation, by hiding its intrinsic violence and imposition, is a typical example of a distorted communication, which was defined as ideology by Jürgen Habermas. This is part of the expansion of systems of instrumental rationality that takes place under the process of modernization and it is inherently pernicious in terms of socially deleterious effects³. Ideologies - as pointed out by Antonio Gramsci as well as by Trần Đức Thảo - are historical facts that must be fought and unveiled in their character of instruments of domination⁴.

We should go back to almost a century ago, when a group of Marxist intellectuals set up the *Institut für Sozialforschung* (Institute of Social Research) at Frankfurt University in Germany in 1922: their heterodox view according to which ideologies shape the thinking and science is neither value neutral nor innocent on environmental destruction and loss of life, is a radical critique of the traditional Marxist view on progress, somehow similar to Nietzsche's critique of modernity. Science, formal logic, consistent empiricism and logical neopositivism are just an ideological expression of the contemporary capitalist society, as they equate basically to instrumental or subjective reason, acting as a means toward preservation of inequalities and domination as an end⁵.

The development aid discourse is intrinsically based on mimicry, because it adopts a "rigorous" language of academic science by mimicking empiricist and positivist methods, coining some "scientific" key terms (such as aid effectiveness, money for value, impact evaluation, result-based management, poverty

² P. K. Feyerabend (1999), *Knowledge, Science and Relativism*, Cambridge University Press, Cambridge.

³ J. Habermas (1988), *Philosophical Discourse of Modernity*, Polity Press, Cambridge.

⁴ A. Gramsci (1948), *Il Materialismo Storico e la Filosofia di Benedetto Croce*, Einaudi, Turin; T. Đức Thảo (1946), "Marxisme et Phénoménologie", *La Revue Internationale*, Janvier-Février.

⁵ M. Horkheimer (1974 [1947]), *Eclipse of Reason*, Seabury Press, New York.

reduction, sustainability, process orientation) and some paradoxical concepts (such as human development, global public goods, national or global development goals), which are based on the assumption of an harmonious world.

It is clear that the idea of conflictual interests among divergent multiple classes and multiple gender stratifications poses difficult and embarrassing questions to the harmonious idea of society associated to a rationalistic, atomistic, hedonistic methodology of implementing "global" sustainable goals and "human" development.

The prevailing dichotomous dialectic between Public (or State at national and sub-national level) and Private sector, with the new synthesis represented by the so-called Public and Private Partnership (PPP), solving the conflict between the thesis and antithesis by reconciling their common truths and forming a new thesis, or development paradigm, is just another erroneous way of conceptualizing development in a simple and potentially harmonious way.

Quite the opposite, development should mean escaping from the fallacy of such a narrow and misleading narrative. The move towards "demythologization" of the development aid discourse and project making practice requires the recognition of the massive conformity of subaltern views of international aid to the authority and self-legitimizing economic, political and cultural powers which dominate societies.

A critical theory of transformative development should be focused on war against any form of authoritarianism, social discrimination, inequalities, and accept complex conflicts among many stratified groups and classes, based on dialectical, open and aporetic thinking (and action).

But such net position is quite rare. Rather, development is an amoeba word, taking many shapes, meaning different things to different people and the idea of a general consensus on it is false by definition. Broadly speaking, development can be interpreted as the dynamics of complex, institutionally-embedded, path-dependent and evolving systems, with objectives and processes being intertwined.

Development aid standardized practice carries risks of routinizing, institutionalizing and depoliticizing participation that should be an empowering active process to enable people's involvement in the self-determined development of their lives and environment, rather than a co-opting practice and a process of making local people participate in 'the' project to achieve predetermined national or global development goals. Functional participation is different from transformative participation to catalyze change; free and transformative participation cannot be easily fixed into a predetermined project framework.

Given that premise, the key starting planning question should be: whose logic

model, and for whom?

Foreign aid is a field where many gaps exist between and within:

- i. policy makers who define development strategies,
- ii. those temporarily established organizations which participate actively in project funding, planning and implementation,
- iii. the partners of recipient countries involved in implementing and monitoring initiatives,
- iv. the final beneficiaries who receive and use aid, and
- v. those who are not directly reached by the intervention in recipient countries but are expected to be affected by its impact.

Those who decide the goals and the amount of aid and those who supply funds and manage the administrative process play an important mediation role. Their role is crucial in terms of direct and indirect influence over project planning. The projects to be submitted in order to receive financial support are expected to satisfy their expectations, and to use their grammar and language. This creates problems to some implementing transformative agencies who may have clear strategies and visions but are obliged to divide artificially complex problems into small parts (i.e. limited projects) suitable for aid financing.

Language is never simply a neutral instrument to convey meaning, but rather a culturally subjective system reflecting peoples' worldview and is populated – overpopulated – with the intentions of others, as Mikhail Bakhtin said⁶. The consequence is that a project thought to be formulated to support changes in the life of the final beneficiaries of aid is planned using the "professional" language of funders in aid interaction, and funders are quite distant and different (culturally, not just physically) from final users given their asymmetrical relationships. This situation creates external incentives and pressures on those who submit proposals to be financed to adopt the forms and logic of the funders; this is the practice of 'isomorphic mimicry'⁷, the camouflage strategy consistent with funders' expectations.

A second consideration is that logic models are subjective.

"Since the measuring device has been constructed by the observer, we have to remember that what we observe is not nature itself but nature exposed to our method of questioning" as Werner Heisenberg said⁸. And "We see things not as

⁶ M. M. Bakhtin (1981 [1930s]), *The Dialogic Imagination: Four Essays*, University of Texas Press, Austin.

⁷ L. Pritchett, M. Woolcock, M. Andrews (2010), *Capability Traps? The Mechanisms of Persistent Implementation Failure*, CGD Working Paper, N. 234, Washington D. C.

⁸ W. Heisenberg (1958), *Physics and Philosophy: The Revolution in Modern Science*, Harper and Row, New York.

they are, but as we are....” added Anais Nin⁹.

The main risk of imposing the Western logic of intervention through aid projects has always been a main developmental NGOs’ concern, despite their common usage of standardized project planning.

A radical critique argues that a drastic shift is required in terms of paradigmatic changes in concepts, values, behaviors and methods, and self-critical epistemological awareness, questioning how we come to know what we think we know.

When we consider the critiques moved directly to the standard Project Cycle Management (PCM) and Logical Framework (LF), we encounter some common issues¹⁰:

- “too linear...”
- “too limited...”
- “...constraining”
- “doesn’t capture complexity...”
- “...nuances are lost”
- “imposing Western logic”
- lack-frame, lock-frame, logic-less frame
- too graphic...”
- “needs more specific details...”
- “...connections are not clear enough...”
- “not evaluable...”
- ‘tunnel vision’ (blindness to effects other than the stated objectives).

Even if the Logical Framework has mutated into many forms and there is no one pure model, we can summarize and describe its implicit interaction between the ways of showing (logic models) and the ways of knowing (epistemology).

⁹ A. Nin (1961), *The Seduction of the Minotaur*, Alan Swallow, Denver.

¹⁰ R. Millett, S. Dodson, C. Phillips (2000), *Application of Logic Modeling Processes to Explore Theory of Change from Diverse Cultural Perspectives*, American Evaluation Association, mimeo.

Tab. 1 - Logic models and epistemology Interaction

	Causal (Attribution)	Quasi-Causal (Contribution)
Linear (Synchrony)	Project Cycle Management and Logical Framework	
Non-linear (Asynchrony)		

There is an inescapable gap between projects and development, and such an inherent tension must be managed. Development is embedded into life and change; it cannot be constrained into projects' boundaries.

Karen Blixen¹¹ told the tale of a man who lived in a house not far from a pond with a lot of fish in it. One night the man was woken up by a terrible noise, and set out in the dark to find the cause of it. He took the road to the pond, he fell into a ditch, got up, fell into another ditch, got out of that and so on. Then he found that a big leakage had been made in the dam, and the water was running out with all the fish in it. He set to work and stopped the hole, and only when this had been done did he go back to bed. When the next morning the man looked out of his window, he saw a stork!

The man could not know that it was a stork. Guided by all his trials and his purpose in view, he had his reward, in the morning, when he saw the stork. At the end of this tale, Blixen's key question is: when the design of my life is complete, shall I, shall other people see a stork?

The moral of this tale is that when in the end, the day comes on which one is going away, he/she learns the strange lesson that things can happen which we ourselves cannot possibly imagine, beforehand or at the time when they are taking place or afterwards when we look back on them. The drawing is not planned, projected or controlled. The complete drawing is not what guides from the beginning the entire life, rather it is what life leaves behind, the story. And, the story reveals "the meaning of what otherwise would remain an unbearable sequence of sheer happenings"¹².

Therefore, one should mind the gap between the project and the story, because the stork is a story-teller, not a planned project based on an ex-ante approach. To

¹¹ K. Blixen (1937), *Out of Africa*, Random House, New York.

¹² H. Arendt (1968), "Isak Dinesen: 1885 – 1963" , in *Men in Dark Times*, Harcourt, Brace & World, New York.

cite Pier Paolo Pasolini, the narrator is not an interpreter, he is a man of culture; the narrator has cultural tasks, not those of representing reality¹³. This implies a gap between a project and the real processes associated to it, as well as between reality and evaluation, so that the ambition should be to lend wings to the project, that is consider it wider beyond its own boundaries.

This is the kind of problems William Easterly was concerned about when he criticized the influence of planners who want to achieve the ambitious Millennium Development Goals (MDGs) with the help of planning. With the MDGs – replaced by the Sustainable Development Goals (SDGs) in 2015 – at macro level, as well as with Project Cycle Management (PCM) and Logical Framework (LF) at micro level, the planners set goals and know exactly what to do and where to go. And when the targets are not achieved, the planners find a reason to explain why they have not achieved the goal: there were not enough resources available or something unpredictable happened or somebody else failed, so that is not the plan or the project to be blamed for the failure. Easterly advocated a key role for the searchers, those who try things out, the pathfinders who don't pretend to know exactly what and how everything works in advance of the implementation of the project/plan and who look for bottom-up solutions to specific needs¹⁴.

In an epistemological perspective, this line of thoughts can be summarized in the importance of uncertainty about the future, determined by the overarching role of external and unpredictable events as well as the constant and non-linear interaction of a complex set of factors on the final results of choices and situations. The uncertainty is and dominates everywhere and one cannot escape from it by means of probabilistic assessment (i.e. by translating uncertainty into risk) or the tunnel vision of PCM logic.

Using the categories adopted by Glouberman and Zimmerman¹⁵, based on the pioneering studies on complexity during the 1970s¹⁶, systems can be understood as being simple, complicated, complex, or chaotic. Simple and complicated systems or processes (or projects/plans) are related to separate entities or discrete activities (there is a linear dynamics and the sum of individual components generates an outcome corresponding to their combination, or $1+1=2$).

Complex systems are based on relationships and their properties of self-organisation, interconnectedness and evolution prevail (through non-predictable

¹³ M. Baliani (2011), *Body of State*, Fairleigh Dickinson University Press, Lanham.

¹⁴ W. Easterly (2006), *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*, Penguin Press HC, New York.

¹⁵ S. Glouberman and B. Zimmerman (2002), *Complicated and Complex Systems: What Would Successful Reform of Medicare Look Like?*, Commission on the Future of Health Care in Canada, Discussion Paper 8.

¹⁶ H. Atlan (1972), *L'organisation biologique et la théorie de l'information*, Hermann, Paris.

and non-linear dynamics in which the whole is greater than the sum of the known and knowable parts, so that $1+1\neq 2$).

2. (Re-)conceptualizing development projects

The tunnel vision of PCM logic was imagined fifty years ago and applied since then to simple or complicated evidence-based projects around defined diagnoses with discrete interventions. Nowadays development is theorized as a complex adaptive system embedded in a multi-dimensional web of interconnections between and within contexts and specificities, through historical and social connections. This new conceptualization of development implies the interconnecting principles of (eco-system and social-system) resilience, adaptation, equity, access, transformative empowerment, community self-determination and inter-sectoral collaboration, by encompassing the environmental, social, economic, political and cultural dimensions¹⁷.

Yet there are no standardized emergent approaches in project management that replace old PCM so that traditional approaches to simple or complicated projects are used to address the complexity domain in practice. The problem is that "Complexity is the science of the 21st century. The catch is that we may have to wait decades to see it applied" to cite Albert-László Barabási¹⁸.

Additionally, if the idea of complex systems demonstrates that they cannot be understood solely by simple or complicated approaches to evidence, policy, planning and management, then also the so called micro-macro paradox of aid¹⁹ is misleading. The Keynesian concerns with the fact that uncertainty drives an epistemological gap between individual (micro) behavior and developmental (macro) outcomes, because everything and everyone is dependent and embedded into the context, should suggest caution to avoid the risk of committing the so called fallacy of composition (or atomistic fallacy)²⁰. Simply, the individual project level cannot be generalized and equated to the collective

¹⁷ C. M. Martin and J. P. Sturmberg (2005), "General practice: chaos, complexity and innovation", *The Medical Journal of Australia*, Vol. 183, N. 2.

¹⁸ A. L. Barabási (2003), *How everything is connected to everything else and what it means for business, science and everyday life*, Plume, New York.

¹⁹ At a micro level, all donors report the success of most of their projects and programs, but - due to the aid fungibility and the leakage of the aid into unproductive expenditure in the public sector - the is no impact at macro level so that it is impossible to establish any significant correlation between aid and growth rate of GNP in developing countries. See: P. Mosley (1986), "Aid-effectiveness: The Micro-Macro Paradox", *IDS Bulletin*, Vol. 17, Issue 2.

²⁰ J. Jespersen (2009), *Macroeconomic Methodology: Post-Keynesian Perspective*, Edward Elgar Publ., Northampton.

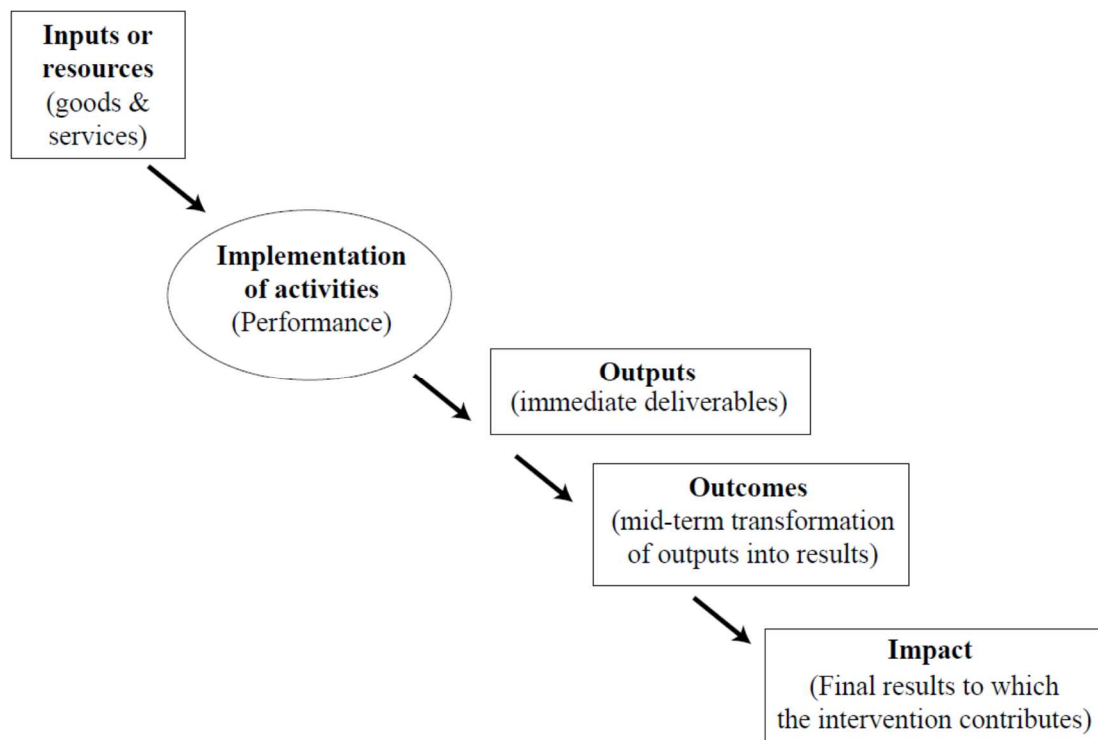
level of systemic and complex development.

At the very root of the project development problem is that there is a contradiction, an illogicality between current development conceptualization and project cycle logic.

From one side, the project cycle logic is derived from an engineering framework, based on the assumption that there is one goal to be reached and there is a set of well-defined resources dedicated to achieving specific results in a defined period of time through the implementation of some activities. The principle of a linear sequence prevails, by imposing its rationality:

- some financial, human and material resources (or inputs) – such as money, equipment, staff time, managerial time, local knowledge, and trained personnel – are used to produce the intended outputs of a project;
- some actions are performed to produce specific outputs by using inputs, such as funds, technical assistance and other types of resources;
- some tangible (easily measurable), immediate and intended results are produced, such as goods, services or infrastructure;
- a limited number of specific and desired outcomes are accomplished as a result of the achieved results and contribute to reach a general goal.

Fig. 1. The linear inputs-results process of foreign aid initiatives



Such a linear sequence is closely related with the ideal of an Input-Process-Output (IPO) model, which provides the basic structure for a framework of cumulative change. Multiple and different inputs act as the causative agent of change; a given process (activated by a sequence of activities to be implemented) represents the mechanism followed to transfer inputs into change to reach results. Outputs and outcomes represent changes in social, economic and environmental system structure or function after perturbation and determine the system's ability to resist, absorb, or adapt to perturbation, which is the improvement of its resilience.

A simplified IPO Model can be adapted to represent the macro-level of aggregate development dynamics. As the Estonian Ragnar Nurkse, one of the founders of Development Economics, wrote in 1953, the essence of economic development process is the diversion of a part of society's currently available resources to the purpose of increasing the stock of capital goods so as to make possible an expansion of consumable output in the future²¹. This classical definition refers only to the accumulation of material or real capital, such as plant and equipment, tools and instrument, machinery and infrastructure. A more comprehensive and recent definition must include both tangible and intangible goods, like standard of education and health (the so called human capital), scientific tradition and research, culture, institutional quality, social goods, environmental resources. In broader terms, it would be an over-simplification to consider economic development as a matter of real capital formation alone, neglecting social, cultural, political, environmental and technological factors.

The specific place-based context and the availability of fiscal resources play a considerable role in supporting planning quality at macro-economic level. All together, these inputs determine the dynamics or process of political and institutional quality, which in turn cause projects and programs' design and effectiveness, from which the results or outputs will arise in terms of Sustainable development goals, real process of people participation, empowerment and ownership of development processes and changes in subjective attitudes, formal laws and rules.

²¹ R. Nurkse (1953), *Problems of Capital Formation in Underdeveloped Countries*, Oxford University Press, New York.

expected from it²⁴. And Albert Hirschman, one of the most influential development economists of the 20th century, suggested that the economics of development must learn to work out its own abstractions²⁵.

But what determined a profound cultural change and the replacement of such sophisticated and mathematical techniques in the 1980s was not the consequences of such a warning, but the combination of different factors:

- the failure of CBA to develop a credible and practical link between projects and policies,
- the increasing emphasis on fast disbursing lending,
- the emergence of the NGOs as new key actors in the development cooperation market, hardly inclined to economic and mathematical discourse and with a more sociological and organizational attitude towards development dynamics.

That is why the sociological and organizational approach to projects found its expression in the Logical framework and PCM, easily understood without any specific technical background, backed by its linear logic and common sense²⁶.

If on one side, the project cycle logic is derived from such an engineering and linear framework – regardless of whether project is considered from an economic and mathematical perspective or from a sociological and organizational one –, on another side the development conceptualization has followed its own path, unconnected with project identification, implementation and evaluation.

As contested as it is both politically and theoretically across disciplines and epistemological perspectives, the current and prevailing discourse on development is summarized by the SDGs narrative about the concepts of empowerment, non-discrimination, just, equitable, tolerant, open and socially inclusive world, in which “no one is left behind” in terms of well-being and decent work. This vision is miles away from any simple and linear approach to development projects.

Development can be conceptualized in terms of the capacity to respond strategically to the unexpected (changing circumstances) and to lead with resilience in the face of the unexpected. This means a process in terms of power change, a transformative continuing dynamics to enable people to decide and

²⁴ S. Chakravarty (1968), *The logic of investment planning*, North Holland Pub. Co., Amsterdam.

²⁵ A. O. Hirschman (1958), *The Strategy of Economic Development*, Yale University Press, New Haven.

²⁶ G. Pennisi, P. L. Scandizzo (2006), “Economic Evaluation in an Age of Uncertainty”, in *Evaluation*, Vol 12(1).

take action (empowerment), as emphasized by Bjørn Hersoug²⁷, to be more resilient.

Based on a concrete multidimensional perspective linked to the complexity and interconnectedness of the three pillars (economic, social, environmental), there is little scope for the simple linearity of development project's design. In practice, nearly every problem-‘tree’ – the starting point for PCM logic, that is mapping the main problems to be solved by the project and establishing cause and effect relationships among them – is really a web, due to crosscutting and feedback effects. Consequently, the objectives-tree – replacing the problem statements with statements of potential solutions in the context of the PCM, re-formulating ‘cause-effect’ relationship in ‘means-end’ – is again a web. Based on the rationality of internal logic, a PCM-led project design is a "mechanical" sequence of correlated steps, simply taking into account the external factors as disturbing “noise” and the national context as a preliminary framework to be considered as just broad horizon. The complexity of development is assumed but conveniently left out by artificially dividing problems into small parts (i.e. limited projects) suitable for financing.

Here is the crucial gap between development conceptualization and project design based on the Logical Framework: in term of development complexity, a development project should not be evaluated in binary terms, as either achieved or not.

Flexibility is needed for contexts with multiple diverse stakeholders and considerable change and uncertainty. The development process is mainly focused on agents of change, and on their goals and values, capabilities and functionings, by applying the human development conceptualization developed by Amartya Sen²⁸ and according to which we can distinguish and link:

- capabilities as abilities/skills and opportunities/chances to be free to transform resources into valuable outcomes and achievements,
- functionings as results in terms of beings and doings, actual achievements.

In theory, this implies that relevant and changing processes related to policies, mechanisms, and institutions, as well as practices and relationships should be identified based on capabilities, rather than designing projects to directly produce other intended and tangible changes.

Capabilities is not simply the process, it is the metrics of development, and it is

²⁷ B. Hersoug (1996), “Logical Framework Analysis in an Illogical World”, *Forum for Development Studies*, Vol. 23 (2).

²⁸ M. Nussbaum (2011), *Creating Capabilities: The Human Development Approach*, Harvard University Press, Cambridge, MA.

both process of change and ends. One should avoid the risk of designing projects focused on just one stage (inputs, activities, results or process by itself). If development is the emerging dynamics of complex adaptive systems, one should promote a shift from the problems to be solved (simplistic and negativist development analysis) to the different agents of change that must be able and effectively contribute to development, their potentials and aspirations, changing in Knowledge-Attitude-Practice (KAP). Capabilities are determined by entitlements, agency and contexts, which should be carefully considered individually and in their interactions. Unfortunately, this is not the project design practice, due to the fact that the assumption (and context) side of logframes is often superficial and ritualistic, if not neglected altogether.

Because of these problems, scholars like Rick Davies propose the Social Framework, focused on different actors connected by their relationships rather than a sequence of stages over time²⁹.

Despite this landscape and the importance of what emerges beyond what is framed in the LF matrix, the approach to PCM has not changed much. Differently from military and corporate environments, in which LF was introduced in the 1960s, differences in opinion among stakeholders are frequent in the development arena and this makes the assumption of consensual objectives difficult, as a single center of authority rarely exists in development and agreed objectives are rare to find. The LF approach tends to over-specify objectives and to over-emphasize control as opposed to flexibility; often LF is imposed externally by donors and then tends to be applied in an over-standardized, rigid and top-down manner so that the use of LFA in a cross-cultural context has often led to the domination of an external concept and the development ideology. Power imbalances, low trust and existential distances between “partners” have contributed to the lock-frame syndrome³⁰.

The reversal of the project sequence conceptualization – from ‘inputs to outcomes’ to ‘outcomes to inputs’ – is a recent and practical attempt at updating the PCM in order to emphasize the paramount importance of results. Thus, results become the most important focus of a project to the point that it leads to the idea to manage for, and not through, results. A management modality focused on the achievement of development objectives and on the short, medium and long-term sustainable improvement of a country is what determined such reversal. Managing for results or impact means realizing that every project needs adaptations to achieve its intended impacts.

²⁹ R. Davies (2009), *The Use of Social Network Analysis Tools in the Evaluation of Social Change Communications*. An input into the Background Conceptual Paper: An Expanded M&E Framework for Social Change Communication, mimeo, April.

³⁰ R. Hummelbrunner and H. Jones (2013), *A guide to managing in the face of complexity*, ODI Working Paper, October.

A correct understanding of goals and objectives, a proper allocation of available resources and an orientation of relationships between stakeholders to maximize impacts become key elements in managing for impact. The Anglo-Saxon conceptualization of Value for Money (VfM) in aid policies is on the same wavelength: evaluation may focus on measuring outputs, outcomes and impacts based on initial objectives and VfM should focus on demonstrating that outputs, outcomes and impacts are maximized for minimal inputs, without compromising quality.

One consequence is that particular attention must be paid to grasp a systematic understanding of the relationships among changes or results to be achieved, the set of actions that will get the results, the conditions necessary for the actions to get the results (i.e. assumptions) and the resources available in project design. At present, the Theory of Change (ToC) is used to describe a preliminary critical reflection on the 'result chain' of any given project, analyzing and making explicit the causal mechanism through which the conversion of inputs to outputs leading to results and changes at higher levels is expected to occur³¹.

However, in this ToC area concrete and full evidence and literature-based causal dynamics must be shown to explain and justify the planned interventions rather than vague assumptions. But if ToC continues to be superficial and ritualistic, with projects dissociated from their highly dynamic and complex contexts and from serious validation of their assumptions, then the gap between project design linearity and complex development conceptualization appears unbridgeable.

3. Some possible paths to take

The tunnel vision of the PCM logic was imagined fifty years ago and applied since then to simple project design. Below is a short indicative overview and concise description of four different approaches that would likely result in significant improvement of project design on the basis of more realistic, comprehensive and complex views of development and project design. They must be conceived as some useful and interesting sources of inspiration on the way of doing development project design, providing food for thought that can be drawn up and adopted within an appropriate framework of project cycle management.

³¹ C. Valters (2014), *Theories of Change in International Development: Communication, Learning, or Accountability?*, The Asia Foundation JSRP Paper 17, August.

i. Planning linkages and spillovers

Albert Hirschman stressed that uncertainty is a structural element in the decision-making process development and the record of how one thing leads to another and many of the failures of development prescriptions stem from failing to account for uncertainty and idiosyncrasies across countries³². In Hirshman's unbalanced growth process, the size of potential linkages are of paramount importance in designing and evaluating where to locate the initial intervention in a key sector, and context does matter a lot.

Every (endogenous or exogenous) investment in a given sector creates other investments in other sectors, and part of the difficulty for poor economies is a lack of interdependence and "industrial linkages".

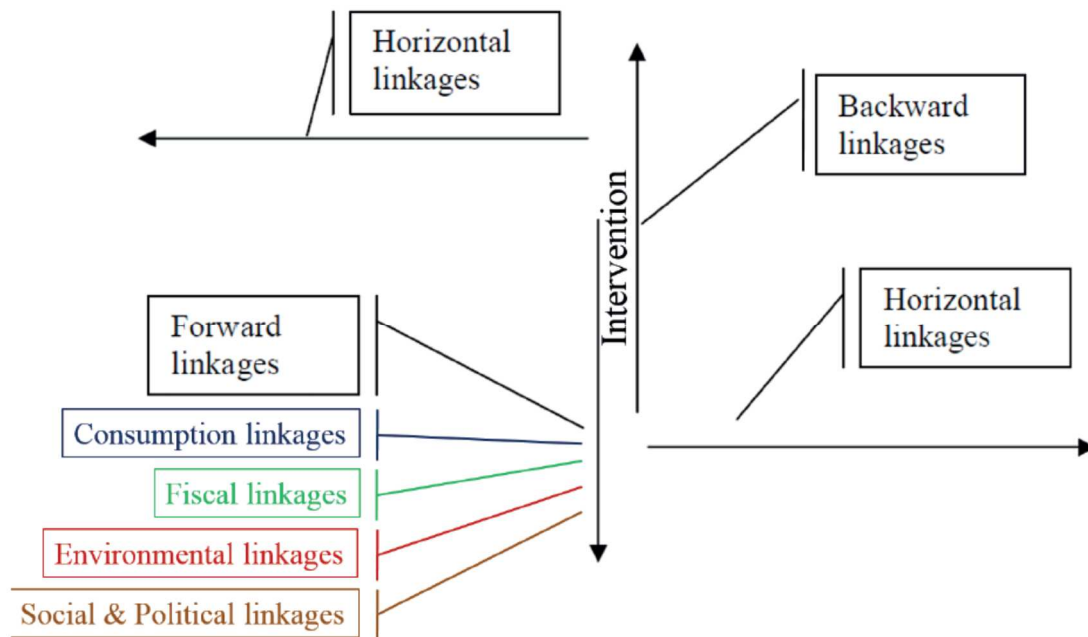
This view offered a new vision by transforming the approach to project design, management and appraisal, but it disappointed many at the World Bank, because they found it impractical³³.

In modelling the possible linkages to be considered, not only production backward and forward linkages should be taken into account for each intervention, as well as consumption and fiscal linkages, but one could also consider environmental and social-political linkages to plan linkages and spillovers adequately.

³² A. Hirschman (1958); A. Hirschman (1970), *Exit, Voice and Loyalty*, Harvard University Press, Cambridge, MA.; A. Hirschman (1977), *The Passion and the Interests: Political Arguments for Capitalism before Its Triumph*, Princeton University Press, Princeton.

³³ M. Alacevich (2012), "Visualizing Uncertainties, or how Albert Hirschman and the World Bank disagreed on project appraisal and development approaches", *The World Bank Policy Research Working Paper* N. 6260.

Fig. 3. The representation of horizontal and vertical linkages



ii. Adopting Institutional analysis and development

Against the Logical Framework approach, according to which the policy is divided and analysed in several stages – a pretty simplistic approach, not helpful in understanding the complexity and interconnectedness of factors –, the Institutional Analysis and Development (IAD) framework³⁴ emphasizes the importance of three levels. The first is a framework to specify the general sets of variables of interest and their relationships to each other, the second is the most appropriate theory to select for the given framework, and the third level is represented by models embedded in the theory, with precise assumptions.

In the given framework, processes and outcomes are assumed to be affected by four types of variables external to individuals: (1) attributes of the physical world, (2) attributes of the community within which actors are embedded, (3) rules that create incentives and constraints for certain actions, and (4)

³⁴ E. Ostrom (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, Cambridge; P. Sabatier and H. Jenkins-Smith (1993), *Policy Change and Learning: An Advocacy Coalition Approach*, Westview, Boulder.

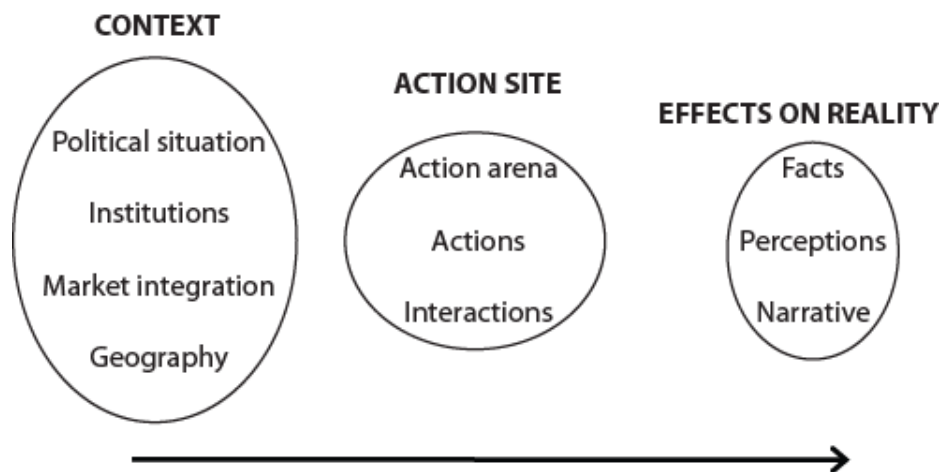
interactions with other individuals.

The project design should clearly define boundaries, rules congruent with local conditions, mechanism to guarantee people participation in modifying operational rules.

Particular attention must be paid to the institutional, socioeconomic, demographic and physical factors that affect human behavior and incentives. Three levels of action must be kept in mind:

- (1) operational (day-to-day activities that directly affect the world),
- (2) collective choice (where decision-makers create rules to impact operational level activities),
- (3) constitutional choice (where decision-makers determine how collective choice participants will be selected and the relationship among members: for example, voting rules): useful for mainstreaming and integration of development cooperation.

Fig. 4. A modified IAD framework



iii. Thinking and approaching complexity

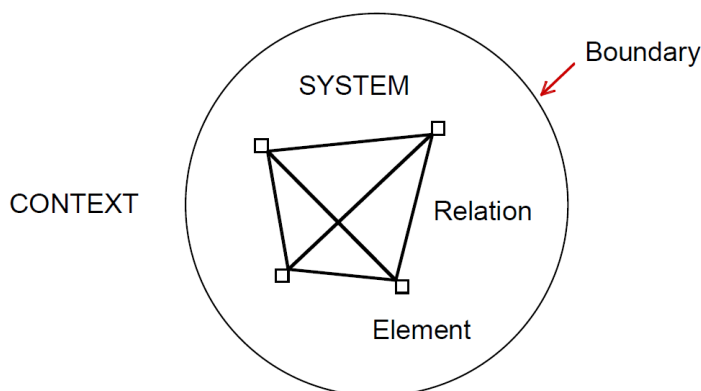
Interventions must become multi-layered and multi-faceted, i.e. complex, as the interaction of various resources (e.g. physical, economic, social, cultural), actors (funders, implementers, partners, beneficiaries) and their linkages.

In a broader sense, a system consists of inter-related elements that connect parts to form a whole. And it has a boundary, which determines what is inside of a system and what is outside (context or environment) ³⁵.

Particular attention must be paid to:

- Interrelationships: dynamic and non-linear aspects, the sensitivity of inter-relationships to context, where the inter-relationships are massively entangled;
- Perspectives and desired changes of stakeholders (considering the imbalances between the various ‘partners’);
- Boundaries: systems approaches are not “holistic” in the sense that they aim to include everything while recognizing the existence of boundary partners, programme strategies and organizational practices;
- networks or loops which connect the various elements.

Fig. 5. Thinking under conditions of complexity³⁶



³⁵ M. Q. Patton (2010), *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use*, Guilford Press, New York.

³⁶ Ibidem.

iv. Real options in project design³⁷

Albert Hirschman criticized the CBA's overly rational, ex-ante approach, with a tendency to overlook the side effects of the project, even though these may be more important than the direct effects (the 'centrality of side effects')³⁸.

He said that the CBA also tends to ignore the hidden rationality that emerges in the project-implementation process ('the hidden hand')³⁹ and argued that social systems, including programs and projects, are designed to respond to participatory ('voice') and market ('exit') behavior⁴⁰.

Given this premise, a reconceptualization of project design may depart from the fact that value creation and market exchange do not concern goods and services per se, but a variety of rights or 'entitlements' as opportunities that constitute contingent wealth⁴¹. Rather than a rigid Logical framework, a project can be conceived as exploitation of the 'opportunities' offered by circumstances; the capacity of 'agents' to be flexible in response to the changing conditions of the environment, in a context of uncertainty.

Because of the multiplicity of possible states of nature (i.e. uncertainty), any project should include clauses that establish conditions that exist in some states of the world and not in others (i.e. contingent conditions). In other terms, the project may be conceived as a 'choice set', a collection of alternative 'opportunities' for action. The project is becoming development of capabilities (and resilience), the asset that enables individuals to exploit opportunities and the 'theory of real options' is a rigorous proposal to give formal body to the concept of 'opportunity' as a contingent right, as an 'option' is the right, but not the obligation to do something in the future.⁴² In practice, a project should embed 'the right' of delaying the start of the project or of expanding its scope later or of closing, suspending or reducing its scope. As an example, the design of the original bridge over the Tagus River at Lisbon was prepared adopting the idea that the second level of the bridge (a project's component) was an option, with the possibility for the government to exercise that option in the future, based on the prevailing conditions and needs. This real option enables decision makers to gauge and react to risk over time and it should increase the project's sustainability and impact.

³⁷ G. Gesner and J. Jardim (1998), "Bridge within a bridge", *Civil Engineering*, October.

³⁸ A. Hirschman, (1967), *Developments Projects Observed*, The Brookings Institution, Washington, D.C.

³⁹ A. Hirschman (1982) "Rival interpretations of market society: Civilizing, destructive or feeble?", *Journal of Economic Literature*, N.20 (4).

⁴⁰ A. Hirschman (1970).

⁴¹ G. Pennisi, P. L. Scandizzo (2006).

⁴² *Ibidem*.

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