

"LOGICAL FRAMEWORKS": PROBLEMS AND POTENTIALS

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***Abstract:** Compared to its huge and still growing use, insufficient in-depth assessment has appeared of the Logical Framework Approach. From a review of three 'generations' of ups, downs and evolution, the paper probes and links LFA's technical intricacies and socio-political assumptions, to give a non-essentialist analysis of problems and potentials. It diagnoses critical issues and dangers in specifying the 'vertical logic' and 'horizontal logic' in logical framework matrices. The matrix's simplistic conceptual structure requires skilled handling to avoid pitfalls and produce acceptable approximations or to know when not to employ it. Top-down contexts of use have often worked against this, amplifying rather than countering dangers from the approach's background technocratic assumptions.*

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Acronyms: DANIDA = Danish International Development Agency; DFID = (UK) Department for International Development (from 1997); GTZ = Agency for Technical Cooperation, German government;; LF = Logical Framework; LFA = Logical Framework Approach; MBO = Management by Objectives; NORAD = Norwegian Agency for Development; ODA = (UK) Overseas Development Administration (to 1997); OOIP = Objectives Oriented Implementation & Planning = ZOPP; PCM = Project Cycle Management; PM = Project Matrix; PPBS = Planning, Programming and Budgeting System; PRA = Participatory Rural/Rapid Appraisal; Sida, formerly SIDA = Swedish International Development Agency; USAID = AID = Agency for International Development (US government); ZOPP = Zielorienterte Projektplanung = objectives oriented project planning.

1. LOGFRAME: REMARKABLE RISE, PERSISTING FUNDAMENTAL DOUBTS

The "logical framework" has become an enormously widely employed tool in project planning and management, especially but not only in development aid work. It is now used by nearly all aid funding agencies, and therefore by thousands of client organizations around the world. In most cases use is obligatory. In the mid-1990s even the World Bank and Swedish Sida finally adopted it, as did numerous NGOs of their own volition or because funders insisted. It has entered emergency relief aid too. Logical frameworks (LFs)--also known as logframes, project frameworks, project matrices and by many new labels--are a central example in the rise of a management style which demands precisely ordered and in general quantified objectives.

For contexts with multiple diverse stakeholders and considerable change and uncertainty Hersoug (1996) shows how the Logical Framework Approach (LFA) tends to over-specify objectives: to overemphasize control as opposed to flexibility when essaying a path forward. Can its dangers be sufficiently counteracted by careful use? LFA best practice can often now help in clarification and negotiation; and we see examples of sustained large-scale use. However, misuse has been extensive, for a simplifying model requires sophisticated, flexible and well-motivated handling. Is good or weak practice likely to be absorbed and routinized?

Available surveys (e.g. MacArthur, 1994, 1996; Wiggins & Shields, 1995) do not highlight past rises and declines of LFA. Section 2 outlines this history--including in USAID and GTZ, leaders of its first and second generations--which reveals LFA's considerable demands for training and commitment and its limitations in the sorts of environments discussed by Hersoug. The surveys rely on the opinions of mostly senior aid administrators, project managers and consultants. Views of many routine users, recipient country staff and 'target groups' remain relatively neglected.¹ Funders' rhetoric of accountability contrasts with their tardiness to systematically evaluate the effects of methods like LFA (Wallace et al., 1997). There is danger

1. Wallace et al. (1997) record the often critical views of British NGO staff forced to adopt LFA. Cracknell & Rednall's 1986 study to advise the British aid ministry whether to adopt LFA remains exceptional in the range of sources it consulted in Europe and North America and normal in its failure to

then of an optimistic bias, for agencies are frequently neither told nor ask about problems, let alone highlight them. Critical observations are kept at the margin and circulate only informally.

Logframe has in practice been resented and mistrusted by many who must use it, and misunderstood and misused by some advocates. Much craft is needed to sensibly fill and use a standardized matrix. Problems include 'tunnel vision'--blindness to effects other than the stated objectives--and 'lock-frame', the tendency to freeze matrices as instruments of one-way accountability (MacArthur, 1994; GTZ, 1996). Sections 3 and 4 will systematically identify major common errors, available responses, and deeper conundrums in specifying logframes' 'vertical logic' and 'horizontal logic'.

LFA attempts something extraordinary: management of public, indeed international, programmes by detailed agreed objectives. It derives from work in engineering, military and private business contexts, whereas in many public, developmental and inter-organizational contexts we lack strong knowledge of causal links and a simple authority setup or its substitute, a shared vision. But it has been at home in aid projects, where power imbalances and existential distance between parties have been so marked. Since LFA does not necessarily induce all to agree, one must ask: is it a tool of hierarchical control from a centre or one that permits negotiation about purposes, or--depending on conditions--either? Section 5 examines these issues and possible scope for improvement.

Some proposed new versions try to respond to Hersoug's type of critique, of overemphasis of 'horizontal logic' and indicators as compared to 'vertical logic' and assumptions. Whereas in the 1970s 'the logframe appeared to represent everything the majority of voluntary agencies did not' (Sommer, 1977:82), including veiled enforcement of a power centre's views, by the 1990s some NGOs felt that LFA could be the kernel of 'a genuinely local dynamic of learning, exchange and organisation which could lead to a process of people driven development' (INTRAC, 1994a: iii). While it is too early to judge the new generation, which remains minority practice, this paper analyses strengths and dangers of the logframe format, biases generated by

consult aid recipients; likewise a recent Norwegian international survey of Results-Based Management.

predominant contexts and styles of use, and the challenges which any more flexible and democratic use must meet.

2. THE LFA: COMPONENTS, GENERATIONS, HYPOTHESES

The logical framework - elements and variants

The LFA is an attempt to think in an integrated way about: a) project objectives, distinguishing various levels; b) the causal linkages between these levels; c) the factors in the project's environment that are needed for the linkages to be valid; and d) how to assess the degree of fulfilment of the various objectives. Element a), a hierarchy of objectives, is the heart of the exercise; the other elements try to operationalize and rationalize it. Elements b) and c) constitute the so-called '*vertical logic*' of the resulting matrix, the relations between levels of objectives; and part d) concerns the '*horizontal logic*', the relations between objectives and operational measures. Logframe thus has several components, which can receive different degrees of emphasis and be operationalized in various ways.

Figure 1 shows the latest European Commission (EC) version, as typical of most current formats. The lefthand column specifies four levels of objectives (*Activities-Outputs-Purpose-Goal*); it should tell a feasible means-to-ends narrative. The second and third columns specify corresponding sets of 'objectively verifiable indicators' and 'means of verification' (sources of information on the indicators). In fact there is a fifth level in the means-ends narrative, Inputs, but shown in the space for indicators of Activities, which reflects a belief that Activity and Input indicators are self-evident and do not require special attention. The final column is for key assumptions concerning factors affecting the links between the levels of objectives. Assumptions about conditions required to reach one level are specified at the level below, so the matrix acquires a 'tail' concerning required start-up conditions.

The matrix format has changed remarkably little over 30 years. The original and long dominant 4x4 USAID version was prepared in 1969-70 by Leon Rosenberg and others, at Fry Associates and then at Practical Concepts Incorporated (Solem, 1987). It had no Activities level between Inputs and Outputs; Inputs formed the bottom row and so the narrative summary read *Inputs-Outputs-Purpose-Goal*; and indicators were required for Inputs too. Assumptions

referred to the linkages between a level and the one above rather than the one below. There were no other significant differences from the current European format.

Figure 1: European Commission's version of the project matrix (EC, 1999)

INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS
1. OVERALL OBJECTIVE The longer-term benefits to (target-group) beneficiaries and wider benefits to other groups	1. INDICATORS Measures (direct or indirect) to verify to what extent the overall objective is fulfilled	Data sources for indicators for overall objective	[This cell is empty in the EC version but some versions put here: Important events, conditions or decisions necessary for sustaining objectives in the long run]
2. PROJECT PURPOSE Benefits to be received by the project beneficiaries or target group	INDICATORS Measures (direct or indirect) to verify to what extent the project purpose is fulfilled.	Data sources for indicators for project purpose	1. ASSUMPTIONS Important events, conditions or decisions outside the control of the project which must prevail for the overall objective to be attained
3. RESULTS Services to be delivered to the intended beneficiaries or target group	INDICATORS Measures (direct or indirect) to verify to what extent the results are produced	Data sources for indicators for results	2. ASSUMPTIONS Important events, conditions or decisions outside the control of the project management, necessary for the achievement of the project purpose
4. ACTIVITIES The activities that have to be undertaken by the project in order to produce the outputs	5. INPUTS Goods and services necessary to undertake the activities		3. ASSUMPTIONS Important events, conditions or decisions outside the control of the project management, necessary for the production of the results
			4. PRECONDITIONS

The USAID 4x4 matrix, with its columns for indicators and data sources and its neglect of Activities, matched a managerialist concern to fit non-commercial projects for *ex post* evaluation by enforcing pre-stated objectives as criteria (MacArthur, 1994). Most successor matrices simply repeated those features, but the NORAD version and new GTZ and UNICEF versions have less

emphasis on performance indicators, with only one column for them and means of verification. Terms vary too; many users found the USAID terms *Goal* and *Purpose* unhelpful, and adopted *Impacts* and *Effects*, or *Development Objective* and *Immediate Objective*.

Variant matrices still remain easily recognisable as cousins for they share the following ideas:

1. Objectives-focus: stress on explicit, singular, statements of project and policy objectives.
2. Means-ends focus: organization of these objectives into a hierarchical (and typically pyramidal) system, in which some are simply means and others are ends.
3. Indicator- and target-focus: emphases on measuring attainment of objectives as an unequivocally and universally valuable activity, and on setting targets to guide and assess performance.
4. Project orientation: integration of the above elements in the notion of a project, a largely separable, plannable, manageable zone for physical and/or social engineering.

In addition, there is an emphasis, often strong, on standardization of project descriptions.

Of the problems typical in statements of objectives in public policy and planning²--such as listing of numerous objectives without respect to level, priority and consistency; incomparability; divergence of stated and real objectives--LFA attends particularly to vague and ambiguous statement and to conflation of levels, the blurring of means and ends.³ Specifying and trying to measure objectives are longstanding emphases in management, but LFA adds or increases stresses on specifying different levels, their links, and the role of environmental factors: in other words, 'vertical logic'. Here it provides 'ordinary people not given to seeing far beyond their immediate actions [with] a tool for projecting consequences well into the future' (Solem, 1987:27).⁴

Project matrices are however not *logical* merely from using LF categories; many are illogical. The LF gives a *frame* for *work* and cannot substitute for that work. The term 'frame'

2. For reviews from different eras and settings, see Waterston (1965) and Patton (1997).

3. An example used in ODA serves to illustrate conflation: 'the objective of the project is to send three fisheries experts to country X to promote fishery development'. Inputs (the three experts), activities (their operations in country X), outputs (any direct outcomes from their operations) and purpose (fishery development) of the project have blended into one statement.

4. For examples from relief operations in conflict-driven emergencies, see Gasper (1999a, 1999b).

should also remind us that while the project's ends and means are included, other things--alternatives, negative effects, unintended effects--are excluded.

Three terms could then be separated: (i) 'logical framework'--or better, 'project framework', if the epithet 'logical' makes users lazy and too trusting--a *set of categories* for summarizing a project design; (ii) 'project matrix'--a *description of a particular project* using these categories; and (iii) 'logical framework approach'--a *set of tools, procedures and suggestions* for use of the LF categories to prepare a project matrix, not mere *ad hoc* use.

‘Three generations’ of LFA

Sartorius (1996) defines the *‘first generation’* of LFA as use of the 4x4 USAID matrix in the 1970s and 1980s. Use extended well into the 1990s, though the matrix had been superseded and was ‘not an integrated set of procedures’ (Coleman, 1987:252). It was adopted by the British aid ministry for example as late as 1986. To agencies at risk of otherwise having a fiercer variant of management-by-objectives imposed on them, the USAID matrix had the appeal of apparent simplicity and the authority of long, albeit patchy, use.

Other major perceived attractions were described by Cracknell and Rednall (1986):-

(i) *A synthetic overview*. Analysis of objectives had typically been scattered across large documents. Use of LFs helps readers and writers by requiring synthesis; directs attention also to surrounding conditions and the needs of later monitoring; gives a concise clear overview, particularly useful for busy senior officials and those new to a project; and offers a basis for exchange of views between all involved in a project.

(ii) *Administrative viability*. Unless principles of analysis were incorporated into compulsory routines they were considered unlikely to have wide and sustained impact. For example, in contrast to many approaches cost-benefit analysis became widely established, partly because it states relatively clear instructions. The LF's clear format gives it similar administrative viability.

(iii) *‘Something is better than nothing’*. While definition and measurement of outputs and objectives is more problematic in some types of projects and at higher levels of objectives, there

was so much room for improvement that project matrices would surely help.

Thus the case for logframes emphasized the needs of higher managers, workability, and a pragmatic incrementalism. From their discussions with many user agencies, Cracknell & Rednall warned though that LFA is only beneficial if used in a trained, thoughtful way that is explicit on its rationale and dangers, and if it influences project identification and design from the start rather than being appended later.

Gains in logic in the first generation were of a 'something is better than nothing' degree, to judge by contemporary reviews by USAID, who had the most experience. Hageboeck (1983) and others recorded 'jamming' of too much into four levels, overcasual assumptions analysis, unfulfilled promises concerning information to be collected and used; and what we can call 'box-filling' and 'lock-frame'-ism: filing relevant-sounding bits of information in the matrix cells regardless of precise logic, and then locking the box, never updating the matrix. The great disappointment of the Logframe is that it is so often improperly used. People tend to dwell on how to fill in the boxes rather than on the linkages themselves' (Solem, 1987:23). Prestige and use of the matrix declined in USAID in the late 80s, matching a previous decline of interest in the 1970s, and before a new wave in the late 1990s under new brand names.

With LFA just a pre-specified set of boxes which one tried to fill unaided, with few advised procedures, the components were unlikely to all link logically. Further, it was typically applied to summarize projects that had already been designed and were susceptible to rationalization in only the cosmetic sense (Cracknell & Rednall, 1986; MacArthur, 1994). It served yet as a tool by which to demand accountability from recipients and display it to politicians and taxpayers.⁵

In some other agencies, LFA became in its '*second generation*' a procedure for analysis from problem formulation through project design, not only for later selection, monitoring and evaluation. Around 1980 the German technical cooperation agency GTZ initiated new studies,

5. For ODA by 1994 an official noted that the system had been 'introduced by edict' and 'the benefits of the technique were not realised... the LogFrame was not being used as a planning tool. Instead it had become a desk exercise, a set of boxes filled in, usually at the last minute, to secure funding' (Heard, 1994:26); hence illogical matrices were prevalent. ODA launched a major upgrading operation.

including again by Practical Concepts Incorporated (Steigerwald, 1994). The outcome was ZOPP, the German acronym for objectives-oriented project planning, an upgraded LFA. Remarkably, despite ZOPP's origin, some American audiences are not aware of it as a variant, indeed generation, of LFA. By the early 1990s versions of ZOPP were adopted by NORAD, DANIDA, the European Community and others.

The first ZOPP stage, Participation Analysis or 'stakeholder analysis', identifies the groups and viewpoints involved in a problem area. There follow linked steps of: defining a Problem Tree; converting it into an Objectives Tree; identifying and assessing Alternative Actions concerning those factors over which one has control or much influence, and then selecting one action path from the Objectives Tree; thus converting the Objectives Tree into a Project Matrix, including specified assumptions concerning the important external influences which one cannot control. In some cases the external influences are so negative ('killer-factors' in LFA jargon) for the action which one has selected that one should redesign or drop the proposal. Similar sets of steps are specified for each of a series of stages to detail and review a project's plans.

The recommended method at each stage is guided group discussion amongst relevant parties--a 'ZOPP workshop'--to mobilize and cross-check information and ideas, and build the commitment, working relations and shared perspectives that promote implementation. Comments and suggestions are written up where all can see them. An external moderator facilitates the discussions. Experience has shown though that the preconditions for participatory debate and probing lie deeper than this.

In the 1990s, first and second generation LFA spread widely. For example, Swedish SIDA had used the hierarchy of objectives but not quantified indicators and targets, on grounds of a preference for exploratory, institution-building programmes. In 1993, retitled Sida, it fully adopted LFA, 'last in the line of donors' (Sida, 1995:7).⁶ It had considerable--and typical--

6. Other than, for different reasons, the World Bank (see e.g. Cracknell & Rednall, 1986). Aart van de Laar (personal communication) notes that whereas the UN system required a simple tool to harmonize and discipline diverse and unruly component organizations, the World Bank already had a cohesive organizational culture and line, dominated by engineers, economists and financiers keen to monetize.

difficulties as we will see in Section 5.⁷

Accounts of ZOPP's mixed record emerged from GTZ itself which parallel those from USAID and elsewhere of first-generation LFA. Many said that ZOPP often improved project planning and management, bringing clearer and better inter-related objectives, and more transparency and involvement. Something was better than nothing. But the ZOPP 'something' was--in practice, on average--still seriously problematic (Steigerwald, 1994; Goebel et al., 1996). Firstly, stakeholder analysis was frequently omitted, or if done 'the results are usually not used' (Breitschuh, 1996). Secondly, the problem analyses were simplistic, ahistorical, and negativist (ibid.; Duetting, 1994); to start from 'what is your problem?', rather than from potentials and aspirations, was limiting, even disempowering. Thirdly, ZOPP workshops became overweighted, treated as sufficient and ends in themselves, a ritual which nearly always lacked genuine broad participation (Magura, 1988; Cordingley, 1995; Forster, 1996). The vital first workshop, which for long involved only GTZ HQ, was liable to be manipulated or arbitrary if not preceded by a phase of open exploration and recipient-aider interaction (Gagel, 1996). Fourthly, ZOPP thus tended to generate oversimplified plans, the project matrices, which became treated as bibles and blueprints, 'seen as a rigid directive and unbending administrative rule' (GTZ, 1996:15). Rethinking was not normal: people were afraid to appear as admitting to error, felt tied to partners, and shied away from the work of requesting new approvals from higher levels and facing new appraisal missions (Beier, 1996; Gagel, 1996). Lastly, use of ZOPP methods typically did not outlive donor funding and the presence of TC personnel, due to poor links to local staff and management approaches, and a complexity that often required even the foreign TC staff member to import a specialized ZOPP moderator (ibid.). GTZ officially downgraded LFs and ZOPP, relaunched them in 1996-7 within a broader perspective of project cycle management, and underlined that they are one set of tools amongst many, which like any others have limitations and require flexible and selective use (GTZ, 1997).

The scale and seriousness of the ZOPP experiment make it significant. I draw from this

7. See also e.g. Dewint (1994) on experience in the Belgian aid agency with their version, OOIP.

experience, and that of first-generation LFA, *four hypotheses*: (1) the logframe is a simplistic conceptual structure; (2) its use often requires considerable skill if one is to avoid the many pitfalls and make it a helpful approximation in complex situations; (3) in some cases the logframe's assumptions are too unrealistic to permit even rough approximations, so the skills required include knowing when to supplement, downgrade, or replace it; (4) there are often strong pressures from logframe's context of use and conceptual background to employ it in a compulsory, over-standardized, rigid and over-emphatic, 'top-down' way. Sections 3 and 4 will analyse simplifications and pitfalls in the LF as a conceptual structure. Section 5 will consider the distortions due to its managerialist application.

Sartorius (1996) has described as a *third generation* of LFA a set of advances in the early and mid 1990s: computer packages to ease preparation and revision of matrices, more adequate training, and better insight into indicators and the links of LFA to other planning methods (time scheduling, budgeting, etc.). These were known to users like GTZ and appear more as technical refinements within a second generation. They do not tackle deeper problems arising from LFA's simple structure and technocratic context of use. Better deserving the name third generation are other recent steps: GTZ's rethink of the basic matrix structure and its deregulation of all ZOPP procedures; and the efforts by some social development practitioners to root LFA in an understanding of sustainable development processes and divorce it from top-down use. Section 5 briefly examines these steps too, which will deserve evaluation after longer experience.

3. PROBLEMS IN USING A SIMPLE CONCEPTUAL STRUCTURE,

I: THE "VERTICAL LOGIC"

Orderly hierarchical specification of objectives often helps. LFA adds attention not only to the aspirations whose fulfilment could justify a project, but to the external factors that might promote or thwart them. Structurally-rooted problems in its use include these:

1. meanings of the levels are often difficult to distinguish and apply;
2. trying to clarify links to broad societal goals while retaining a realistic connection to the

- project often produces 'jamming' within the restrictive format given;
3. the typical insistence on specifying only one Goal and only one Purpose risks tunnel-vision and loss of synergies, for the sake of control;
 4. the absence of an explicit time dimension contributes to frequent over-aggregation at Purpose level;
 5. process objectives, concerning how things are done rather than what end-state outcomes are achieved, are hard to include;
 6. the Assumptions column, perhaps the most important, has been literally marginalized;
 7. a single environment-inputs-outputs-impact vector can be dignified as 'the project design', suppressing attention to alternatives and to learning.

These are difficulties of trying to present objectives all in a short, simple means-ends chain. They can be countered by skilled handling--if the management context permits--but fully resolving some of them (notably 5 and 7) requires transcending the logframe format.

The danger of obscure meanings and distinctions for levels

Differences between levels have remained unclear. A key problem concerns the meaning of 'Purpose/'Immediate Objective'. Purpose proves to be the linchpin level, closest to the interface of the project with its environment, and where ambiguities over the project's degree of influence will be reflected. Definitions and identifications of Output and Purpose in the past were found typically to be interchangeable (Eggers, 1992; Cordingley, 1995). Purpose was often just a semantic umbrella (graced for example with the name 'system') spread above the Outputs, not a distinct stage in a cause-effect chain. LFA contained 'no clear distinction' (Eggers, 1994:63).⁸

The USAID guideline was that Outputs and Inputs were the project itself, and Purpose and Goal the objectives towards which the project is a means. Complementary projects are needed to fulfil the Goal, which is at a programme or macro-programme level (i.e. beyond the project though not very much higher). Unlike Purpose and Goal, Outputs are supposed to be basically under project control; they are the results that 'the project administration should be able to guarantee' (NORAD, 1992:16). But this is not a reliable dividing line: Outputs too are rarely completely--or even nearly completely--under development project control (see e.g. Bowden,

8. See e.g. the definitions essayed in Wiggins & Shields's survey paper (1995).

1988, on findings from *ex post* evaluation). Limits of the project approach have made definitions of LF levels obscure.

Seeking a sharp distinction, Eggers, architect of the EU's new variant, radically elevated the generality of the Purpose level: 'The project purpose...must differ by its very nature from the last output in the input-output chain. It must coincide with a lasting improvement of people's quality of life' (1994:63). Can this in general be produced in just three steps from project inputs? In contrast, other authors have radically downgraded the generality of the Goal level, to avoid over-condensed hierarchies; and most continue to act as if distinctions between levels are contextual, not inherent - Inputs in one context could be Purposes in another. The European Commission itself does not follow Eggers' definition consistently. Even if we remove the adjective 'lasting', people's response to Outputs needs fuller attention; we cannot in general leap from Outputs to benefits in one move.

GTZ (1997) does better by now having two Goal levels, allowing more space to represent beneficiaries' active agency: Outputs/Results are seen as goods or services that become available to an intended beneficiary group; Purpose concerns the intended beneficiary response, their use of the goods/services, something outside project control; Development Goal concerns the intended benefits for the target group; and Overall Goal is the sector level goal which the project serves.

Numbers of levels and treatment of higher levels; the problem of 'jamming'

Four has been the favoured number of levels: it gives two within the project and two outside, and is the minimum necessary to reflect a project-non project division plus some complexity in each. Sometimes one can effectively summarize one's analysis into four or five levels of objectives; sometimes not, especially when talking of building (and using) capacity, systems and institutions. The 4x4 matrix needed to be seen as a prototype (an original model from which improved types can be made or that has analogies at a later period; a thing that serves as an example of a type - Collins Dictionary), not as an archetype (a perfect or typical specimen).

In striving to link project activities to broader societal goals, LFA users long tended to see

the Goal level as concerning national-level and/or universal and humanitarian values. In a few strides, the project design showed us the way from standard means to uplifting developmental ends. But this usually snapped the links to mundane activities: too many levels became jammed together, hence clear and logical connections were not made. In USAID jargon, 'jamming' occurred.

Wiggins & Shields recommend that specifications for Goal level should become humbler. Some authors and agencies even omit the Goal level as liable to over-extend the analysis (e.g. Bridger, 1986). Others instead, as we saw, add when required a level between Purpose and Goal, or distinguish Program Goal and Sector Goal (e.g. DANIDA, 1990),. Further, for multi-part projects or programmes a set of linked logframes can be better (e.g. NORAD, 1992). Jamming is thus a soluble problem if prototype not archetype thinking prevails.

In policy analysis we may need to analyse Goals more extensively, restoring the link to broad societal goals but distinguishing several levels above Purpose. Here Fischer (1995)'s model of policy evaluation, for example, can be easily linked to logframes. It avoids one limitation of most logframing: the assumption that there is only one Goal (Chambers, 1995) and only one Purpose (MacArthur, 1994; DFID, 1997).

How many Goals and Purposes?

LFA has adopted the following principle: 'Good project design should, if it was realised, make clear from the outset exactly what objective was to be the main one, the principal determinant of project design and implementation management' (MacArthur, 1994:89). This treats a project as if it were an academic paper with a single author, a single audience, and a short time horizon for influence. It seems to avoid the complications of trying to commensurate different Goals or Purposes.

In practice, nearly every problem-'tree' is really a web, due to crosscutting and feedback effects, so the first picture of an objectives-tree is again a web. Insistence then on a single focal problem, corresponding to Purpose level, aims to give a focused, more manageable project; to

say, for example, 'this is a project about policing not about poverty reduction'. But, for example, many a project seeks to achieve both short-term delivery and longer-term reform and capacity building. Some *but not all* short-term oriented activities serve the longer-term objectives; and vice versa. The project cannot then be presented as a single means-ends chain; and to eliminate, say, the longer-term oriented activities for sake of a simpler design will undermine effectiveness.

Where are time, and process values, in the LF's means-ends 'narrative' ?

The logframe struggles to describe slow, hard-to-schedule and recursive cause-effect links. And while it aims to summarize a means-to-ends narrative, its lack of an explicit time dimension may cause confusion. Higher levels may become described in generalized value terms, not as subsequent, caused effects but instead as more general descriptions of the lower levels. Systematic cause-effect problem analysis to build up the specification of objectives can reduce this failing, and brings more modest Goal specifications.

Hoksbergen (1986), in a critique of USAID *ex post* evaluations including many that used logframes, argues further that attempts to sharply separate means and ends lead to downgrading of process values (such as participation as an objective in its own right). Attention to process as well as output objectives might imply dropping the one Purpose and/or one Goal rule, but in fact goes beyond logframe's means-ends categories.

The centrality yet marginalization of assumptions analysis

Achievement of a lower LF level should not automatically imply achievement of the next higher level, otherwise we have potentially misleading tautology.⁹ Thus the USAID version did

9. Objectives can easily become specified such that hypotheses about links are replaced by tautologies. Gasper (1999c) takes an example issued in 1998 by Sida, intended to show good evaluation practice. By not saying 'Changed A/B/C' at the various objectives levels but instead 'Better /Improved /Effective A/B/C', it prejudged whether the changes specified in the project design really were better/ improved/ effective--in contributing to societal welfare in the project situation concerned, as opposed to in the donor country or some other model case. Prejudgement can be countered by clearer thinking; but in a context of strong imbalance of authority it becomes a serious problem.

not treat Activities separately for it presumed that Activities can follow unproblematically from Inputs, and Outputs from Activities, at least such that we do not need two stages of attention for Input-to-Output. 'With sound design, this conversion [of Inputs to Outputs] was [seen as] largely a management task not heavily influenced by uncertainty from outside assumptions' (MacArthur, 1994:92). This only fits simple or well-standardized activities, as in some physical infrastructure projects. Coleman advises that 'everything that can go wrong will go wrong' is a better hypothesis than 'everything will go to plan'. People underestimate the cumulative implications of the facts that many things can go wrong, with many opportunities to do so, and with knock-on effects. Solem's warning remains relevant: 'In the vast majority of circumstances project designs that appeared to have adequately addressed the goal/ purpose/ output/ input linkages... have come up short', because only one linkage has to fail. 'In short, A.I.D. must continually review the assumptions upon which the..linkages are dependent, and adjust its game plan accordingly. Logical? Yes. Common practice? No!' (Solem, 1987:28-9, 31).

Attention to assumptions has often been superficial. Commonly stated as assumptions were, for example, 'proper implementation', reiterated project hypotheses (like: 'if the inputs are provided, this will lead to the outputs'), or--nothing. LFA then at least shows up casualness about assumptions and prepares the way for more serious treatment. Yet it literally marginalizes assumptions analysis, locating it in the final column of the matrix. 'The fourth column is the second one to be defined when constructing a logical framework', record INTRAC dutifully (1994a:4), without noting the incongruity. The bulk of users who came to the assumptions column fourth tended to be tired and on too different a mental track, after an arduous traverse of indicators.

Layout modifications can counter this neglect: (a) reduction of the two middle columns to one, as do NORAD, sometimes UNICEF, and now GTZ; (b) making the assumptions column the first, and placing the objectives hierarchy ('narrative summary') where it belongs, in the middle (perhaps ringed in bold), with assumptions analysis prominent on its left and performance indicators analysis to its right; (c) providing an extra column next to the assumptions column, in

which assumptions are explained, assessed and considered (USAID 1973's modification #1) or, as in GTZ's new version, for indicators about key assumptions; or (d) having separate columns for 1. matters beyond the project's control but not beyond its influence, and 2. those beyond its influence (Wiggins & Shields, 1995).

Physical marginalization of assumptions analysis reflects relative neglect even more than it causes it. Assumptions analysis helps at design stage, but not if one is rushing to shift funds and retain jobs; and at appraisal stage it becomes threatening, both to project timetables and peace of mind. At review stage, vested interests in the project will have grown, but sometimes need advice on how to survive. Neglect arises thus because assumptions analysis can be disturbing for the project approach, whose own premises have instead frequently been Hirschman's 'Hiding Hand' (that unexpected problems will call forth unexpected efforts and learning) and 'it'll be all right on the night'. The assumptions column was devised in a late 1960s American engineering and management milieu where conditions could be presumed broadly favourable. The assumptions to be highlighted were relatively rare, though significant, contingencies. Where the operating environment is overwhelmingly unfavourable--in terms of economic decline, low staff commitment and skills and replaceability, weak support services, etc.--then the assumptions column might become overwhelming, overwhelmed, and reduced to ritual use. It still gives a pleasing though false sense of security and aids managerial legitimation (Porter et al., 1991).

To give a motivated group the responsibility and access to check assumptions will help more than changing matrix layout. For example, social planners working at or with the UK aid ministry in the 1990s found in the logframe a way to institutionally insert themselves into project analysis and ensure attention to societal process. The step-by-step objectives hierarchy can help (especially if it has an Activities level) to move us beyond 'black box' plans prepared by engineers and technical specialists without serious involvement of others. The obligation to specify higher objectives, causal chains and associated assumptions can open project design, appraisal and review to the scrutiny of anthropologists, organizational analysts, gender specialists, and others. The assumptions column in particular gives social analysts a legitimized,

official channel by which to raise questions and present their insights, which earlier could be slighted by the engineers and economists.

Meanings of the links: a relatively crude type of logic and the question of alternatives

The hypothesized links in the LF mean: given fulfilment of (1) the objectives specified at level x *and* (2) the specific assumed external conditions, the objectives specified at level $x+1$ will be fulfilled. This is a claim that (1) and (2) together form a set of sufficient conditions. But in some cases it is also claimed that one or both are necessary conditions, that there are no alternative routes to the destination: so that we do not need to look to level $x+1$ if targets at level x are not met (see Coleman, 1993); and/or, secondly, that the external factors are indispensable requirements rather than just conducive influences. Those further claims are frequently wrong.

Logframe is a crude way of conceiving cause-effect linkages in a project. Any economics production function is richer. An LF project matrix presents a single snapshot--a linked set of specific target figures across several levels of objectives--selected from the myriad of possible environment-input-output-impact vectors. While useful for an heuristic overview, that rarely deserves legislated status as a contractually binding project design. The project is viewed not as a workshop for creative pursuit of probably evolving visions of ends in a context of evolving knowledge of surely evolving alternative means and other relevant influences; but as a blueprint, a style suitable only for cases of full knowledge of stable environments. Alternatives for achieving higher levels are not indicated, and are in fact excluded if the necessary-as-well-as-sufficient interpretation is adopted. And project design is liable to bloat as significant influences become treated as necessary prerequisites (Smith, 1999).

Conclusion. Some of the problems above, such as ‘jamming’, are remediable by training; some require training plus skill plus motivation. Some can only be solved by knowing when to move beyond the logframe’s premises. All can be excusable in a quick heuristic tool, but not in a format for *the*, contractually binding, project design.

4. PROBLEMS IN USING A SIMPLE CONCEPTUAL STRUCTURE,

II: THE "HORIZONTAL LOGIC"

For many authors, indicators are 'the core' (Balzer), 'the heart', 'the flesh' (Sartorius) of LFA. They favour a practical style of thinking. This practicality can degenerate into tunnel-vision, fetishism, and self-interested manoeuvres; in sum, indicator-itis. Seen at its most virulent in the former command economies, where a welter of State-set performance indicators tried to substitute for market signals, indicatoritis flourishes elsewhere too. Indicators can become symbols, badges of managerial practicality, substitutes for observation and judgement. Critical issues and dangers concerning indicators in LFA include:

1. When should the form of indication be measurement?
2. The presumption that indicators must be in the form of targets.
3. The prevalence of non-valid indicators and the fallacy that all external factors have an influence separable from that of the project/policy.
4. Fetishization: treatment of partial indicators as perfect measures of all facets of the objectives.
5. Tunnel vision: direction of attention away from unintended effects.
6. Distortion of incentives, by tying rewards to indicators with weak scope and validity.
7. Symbolism: the prioritization of rituals of demonstrative accountability, above issues of validity and scope.

To what degree should we measure?

Besides sometimes not monitoring higher objectives when it really is needed, the opposite danger exists too: LFA as a bureaucratic model can insist on separate quantified monitoring for all objectives, regardless of validity and necessity.

Current non-availability of means to *measure* fulfilment of an objective does not imply that the objective is meaningless (Patton, 1997). For example in post-conflict rehabilitation the rebuilding of trust and moral concern are central, yet they cannot be captured adequately by conventional indicators and targets (Christoplos, 1998). We can live with this if a logframe

remains a supplement to the use of intelligence, not a set of blinkers.

In some important cases we need not try to measure at all. The effect of medical practices is usually less context-dependent than that of, say, policing practices. Knowledge of medical success in one country *can* often be taken as valid for another country; and within each country medical research is more widespread and less prone to becoming outdated than social research. Suppose trials in one district of a country have established that 'iodine supplementation in women reduces endemic cretinism and mortality in children in areas with high rates of iodine deficiency' (Garner, 1997: 722). For an iodine supplementation programme in one more district we can reasonably assume efficacy if coverage is achieved; and so, argues Garner, we have no necessity to monitor its impacts on child mortality, which would in practice anyway be near-impossible to separate from the impacts of many other factors.

Targetism

One can have performance *indicators*, categories to measure performance, without setting *targets*, specific planned amounts. Frequently the two are not distinguished. Most LFA discussion of indicators refers in fact to targets. USAID (1973) presented the option of a separate column for targets, rather than conflating that issue with the choice of type of indicator.

Targets can motivate, and they help in *ex ante* appraisal, but bring a danger of rigidity during implementation (Rhoads, 1985). A target should be set in light of the benefits and costs of doing marginally more or less than the specified level, and be updated as those values change. But especially if trust is low, rigidity can result; originally set targets are hallowed as the basis for keeping agents accountable.

Target-ism is characteristically American management. It fits some situations better, others less. Ouchi (1981) recorded the contrast between the target-hungry American vice-presidents of a Japanese bank operating in the U.S. and their Japanese president. The latter held that his role was not to set targets but to provide a philosophy of banking and way of dealing with clients, to subordinates who had the skill, commitment and more detailed knowledge of cases to then make

their own decisions. The more capable and trusted are one's co-workers, the more variable and unpredictable the operating environments, and the more individual the cases that they must deal with, the less appropriate is it to specify targets for them.

Kievelitz (1996) calls for agreement only on general objectives and 'target corridors', not precise targets. Process-approach social planners at DFID have likewise de-emphasized output targets in favour of process 'milestones', such as that consultations were held or agreements reached.

Validity: what is one trying to measure at Purpose and Goal levels?

Trying to establish a 'horizontal logic' with operational indicators makes one think more precisely about the meaning of objectives and hence about the vertical logic. At Purpose and Goal levels one has a choice between measuring (a) (gross) levels and changes in some desired variable (the before-versus-after comparison), and (b) the (net) effect of the project on that desired variable (the with-project versus without-project comparison). The latter is more relevant, when there are many factors with significant influence besides the project, but more difficult. Often, sector- and national-level indicators of little relevance are listed in logframes: projects claim credit for achievements due to other factors (yet cite other factors as adverse when gross achievements are poor).¹⁰

Un-jamming logframes, decreasing the gaps between levels, reduces the discrepancy between gross and net effects. Jamming allowed grand Purpose and Goal statements which offered legitimacy through the promise of fast results. No one objected if evaluation was a ritual anyway and aid projects the pawns of foreign policy (for examples see Clements, 1995).

To distinguish gross and net measures is not enough, for 'other factors' fall into three sets.

10. Clements (1995) highlights this issue. His 1999 paper gives examples from USAID funded projects. Consider another USAID case, a national manpower planning project in Jamaica (O. Davies, 1986), where the indicator for the Goal was 'reduced rates of unemployment and underemployment' as shown in national statistics (ibid.:152): rates influenced by many more powerful factors than the project. One should look instead at employment changes amongst those dealt with by the project, measured by tracer studies, to compare their employment record with that of a comparable sample of people not dealt with.

Case 1: where the project's influence on the desired variable is separable from the other factors then in principle we can screen out those factors' influence, to get valid indications of (net) project effects. This is the assumption in most LFA discussion. But many factors' influence is not separable from that of the project: how the project works and what it leads to depend on the levels of those factors. *Case 2: factors which are necessary conditions for the project to have some impact* are to be covered in LFA under 'assumptions'. *Case 3: factors which affect the project's own degree of impact, but not as necessary conditions, instead interacting more subtly, as non-separable influences.* They too might be discussed in an Assumptions column, but are problematic for the rationale of indicators assumed in LFA, which has considered only cases 1 and 3, the simpler examples of causation.¹¹

Fetishism and tunnel-vision: indications become substitutes for reality

Fetishism means to forget that an indicator is only that, a more or less valid indication for something, not the thing itself; and that its validity should be reexamined regularly, as should the validity of the underlying objective. This will not happen if consistency of data series becomes treated as more important than their relevance.

Tunnel-vision means the exclusion of other aspects of the objectives than those covered by the indicators, the downgrading or exclusion of objectives which do not fit the prescribed form of indicator, and most important, the ignoring of effects other than on the specified objectives: 'look at X' becomes 'look only at X'.¹² It is peculiarly inappropriate for review and evaluation outside of the most routine monitoring; but is found in both the theory and practice of logframe-based M&E. (Gasper, 1999c, discusses the treatment of unintended effects.) Negative effects are often

11. In Omar Davies (1986)'s USAID manpower planning project: Case 1 applies where the project's influence on employment is separable from that of other forces, like levels of domestic and international demand; Case 2 applies when there are necessary conditions for the project to have any influence, such as that the number of jobs is not fixed by other factors and employers are not hostile; Case 3 applies if, say, project influence is importantly increased by the support and commitment of key officials and leaders 'outside' the project.

12. Hoksbergen (1986:291) provides examples from USAID evaluation reports.

downgraded, for example; some recent work inserts questions about them into LF manuals' checklists, as a counterforce. Similarly, indicators are typically scalars whereas the performance or attribute one seeks to characterize is a vector. Take organizational capacity, which has several aspects, each of which is itself a vector of potentials in various task-context situations. A clear indicator of one important aspect of capacity may still be helpful, but becomes a menace if fetishized.

Full indicator-itis: do only what the indicators indicate

If indicators embody incentives then unrestrained self-interest rather than forgetfulness can lead to the above results and worse, as seen in the former Soviet bloc. '...it is relatively easy to manipulate the information presented in these documents' warns Kijne (1994:6) about logframed reports. The likely trend in countries where higher education under budgetary pressure becomes ruled by crude (output-level) indicators -- pass-rates, drop-out rates, proportion of higher grades, etc. -- is veiled decline of standards of achievement. It becomes difficult to fail, and easier to shine. Indicators such as numbers and proportion of crimes solved have helped to corrupt some police forces, which found the invention and solution of crimes on paper a more manageable and rewarding activity than genuine investigation or prevention (see e.g. N. Davies, 1986).

Indicators as symbols

For some types of project we cannot confidently determine their impacts on higher specified objectives levels. Economists warn us for example that the net impact of resources differs from their apparent effects at project level, because of system-wide reallocations induced by their availability. This leaves us, argue Porter et al. (1991), in the same position as primitive peoples, hungry for myths to cope with uncertainties. Performance indicators sometimes fill this role. They provide a locus for symbolic enactment of purposefulness and (superficial) accountability, rather than an engagement with the reality of development processes.

Limits to identifying higher-level effects can induce focus on the outputs level. The

'horizontal logic' compulsion to measure can undermine the LF's fundamental 'vertical logic' contribution of making us look beyond the project. Outputs may even become designated as in effect the indicators for the Purpose. More routinely, elaborate output indicators fixate project staff on ensuring that recipients receive the pre-set means.

‘Indicators of the type "100 craftspersons used 1,200 person-day courses in accounting; representatives of 40 groups completed courses to combat illiteracy; craftspersons from 50 groups have received loans" [a real example] ... enforce a supply orientation of the project implementation' (Gagel, 1996:95).

In contrast a ‘process-integrating’ indicator like ‘At least 60% of the support activities were proposed by the craftspersons themselves’ [another real example] retains and reinforces a flexible demand-orientation. Gagel argues that indicators should be such as to encourage users to participate in identifying options not already seen at the beginning of the project; they should promote involvement and learning rather than suppress them. Recent work on qualitative and process indicators can help, provided indicators are kept in perspective. They are inevitably imperfect tools, and ineffective when certain social and other prerequisites are not met.

Conclusion. The criteria for good indicators--validity yet cost-effectiveness, difficulty of abuse, and the like--are very demanding. They often necessitate extensive consultation and experimentation, to build sufficient technical strength and a broadly accepted balancing of the factors involved in a specific context (Innes, 1990). One needs user commitment to the underlying objectives, not absolute authority to the indicators; and robust mechanisms of checking for abuse. In many areas of work (e.g. capacity building) there is, and can be, no adequate standard list of indicators. They should be worked out by good judgement *in situ*, which implies devolution of authority (Biggs & Matsuert, 1999). Overall, as with 'vertical logic', we see that LFA's 'horizontal logic' requires skilled handling, and that even then it contains some insuperable limits, such as in handling non-separable influences.

A logframe can be of help in planning, screening, and monitoring, perhaps also in *ex ante* appraisal of small straightforward projects; and it gives a snapshot *aide memoire* for managers. It

is inadequate for larger and more complex appraisals or evaluations and is not a sufficient guide for ongoing management. Weaknesses that are tolerable in a sketch aid, if it is used for a certain range of purposes and with skill, become severe if it is extended to other roles and applied insensitively. In particular, in contexts of low trust, project matrices can become treated as 'the' project design, the binding contract, and thereby hinder project learning and evaluation.

5. MANAGERIALIST CONTEXT AND/OR MANAGERIALIST METHOD?

How far is LFA's record one of *distortions* resulting from use in *contexts* marked by sharply unequal power relations and top-down and technocratic conceptions of organizations, objectives, and development? Or how far is LFA an *embodiment* of such conceptions? Both answers contain substantial truth.

A record of funder domination

The contexts of use for first-generation LFA brought major distortions. Pressures for simplification and central control in aid bureaucracies dealing with dependent recipients contributed to its operationalization as only the project matrix format, standardization as a 4x4 matrix for nearly all cases, priority to target-setting, and lock-frame-ism.¹³ While the LF can be used to think about means-ends alternatives, the panoply of indicators and targets is liable to freeze thought.

Second-generation LFA's major variant, ZOPP, continued the emphasis on pre-stated targets at input, activity and output levels, at the expense of more fundamental objectives of learning and building capacities. The supposedly *co-operating* donor dictated the form of the planning process, the same worldwide regardless of the partner. And the key first and second stage ZOPP workshops were internal GTZ affairs. After a decade of extensive use, GTZ had to declare:

13. 'Logframes are also often improperly viewed as "blueprints" - something that once made cannot be changed', reported Solem (1987:23) from interviews with AID Bureau Evaluation Officers. Many of my interviewees and informants for various agencies in the 1990s made similar observations.

'process should not be designed from the GTZ/German perspective alone' (Steigerwald, 1994:6).

Within ZOPP workshops, comments and suggestions are written up where all can see, but Breitschuh and Chambers warn that workshops tend to be dominated by the more powerful and confident, including the moderator; '...the [imposed] imperative of consensus, the reductionism of the method [all situations to be expressed in the same simple form], the use of outsiders' languages, the physical and social isolation from poor women and others' all contribute (Chambers, 1996:17.) In contrast in participatory appraisal (PRA), officials, especially senior ones, lose some of the advantage from their advanced literacy, and can even become at a disadvantage if inhibited about crouching down to create and arrange images on the ground.

The stifling context of use was not uniquely German. Aid-fatigue brought growing resort to managerial control measures. Consider the mid-1990s introduction of LFA by the donor reputed as the most flexible and long-term oriented. 'Sida is the last donor which started to use its own version of LFA... [this] was done without taking note of the experience of LFA of other donors and without making any effort to adapt...to [their] systems' (Rylander & Bergstrom, 1996:16). After 30 years, LFA's terms are not standardized and its experience is inadequately documented and shared. Each funder demands that recipients follow its own variant and usages, and Sida was no exception, other than in reporting on the outcome (Rylander, 1995). It rushed into its projects a system unmastered by itself and unused for its internal operations, with painful results. 'In some cases...cooperation has been seriously disrupted.... One person put it this way: "Is it really right to demand that others do something one cannot do oneself?"... In some of the examples...it is clear that Sida's attitude has not been characterised by respect for its...partners' (Rylander & Bergstrom, 1996: 5, 14, 18).

Logical frameworks and social frameworks: theories of objectives and organizations

While part of this record can be seen as distorted use of LFA in unbalanced contexts of operation, LFA also *embodies* certain managerialist values and perspectives. Its texts appear innocent of work which could delimit its applicability. From systems analysis and psychology, we

will ask when pyramids of objectives will be an adequate representation, even as a simplified working tool, for individuals let alone for inter-agency projects. From organization studies, we will ask what and whose are organizational objectives, and what are the objectives of objectives. From political science, we hardly have to ask why LFA is most used in inter-national aid work, where domestic political balancing can be put aside, yet even there is often *not* used in plan preparation (Wiggins & Shields, 1995), where it would limit donor political discretion (see e.g. Clements, 1995, on USAID.) And from alternative development theory, we face criticisms of the project mode of development and its presumption of existing, attainable or enforceable consensus on goals and how to reach them.

A dominant theme in recent public management advice and reforms has been that objectives must be stated precisely, operationally, and preferably or even necessarily in quantified form. Rhodes calls this 'managerialism.. [: the notion of] professional management based on private sector management experience which sets explicit standards and measures of performance and emphasises output controls' (Rhodes, 1995; see also Pollitt 1992, Enteman 1993). A line runs from much business management theory, which stressed derivation of clear lower-level objectives from the relatively clear and measurable general objective of financial profit (Self, 1972); through the school of 'scientific public administration' and the 1950s doctrine of management-by-objectives (MBO); on to 1960s and 70s formats like PPBS and LFA. Many related methods originated in military planning--including logframe says Nancholas (1998)--another context with clear hierarchy and comparatively simple objectives.

Which problems in stating objectives does LFA recognise and which not?

Of the cognitive problems in statement of programme objectives--problems in knowing what is attainable and therefore worth focussing on, and whether it really would be satisfying once attained-- the LFA responds only to some, as we saw. Through team-building it can help counter some of the socio-political difficulties: that since organizations contain many sub-groups and individuals with their own beliefs and objectives, and public and development programmes

typically involve many organizations, consensus or acquiescence to common objectives is in danger of coming only through grand and vague language. Of other socio-political difficulties it seems hardly aware; for example that public statements of objectives are typically made with an eye to obtaining resources or acceptance or forestalling criticism. Some Southern NGOs have more than one set of goals on file--one for themselves, others for various funders--'double book-keeping' (Hersoug, 1996). LFA also offers no conscious space for the variation between cultures in styles of stating and using objectives. Hofstede (e.g. 1991) has discussed how MBO had to be modified outside America. Nakabayashi (2000) shows this for LFA in Germany, and how ZOPP was in turn modified in Japan. Sizoo (1994) and others go further and assert that LFA is simply alien in many cultural contexts.

Even setting aside societal cultures, the viability of fuller, more precise specification of objectives thus varies according to: (i) the degree of knowledge and/or control possessed; the stronger are uncertainty, novelty, and variation across cases, the less well-grounded is precise specification; a project to build houses lends itself to fuller specification than one to strengthen communities; and (ii) the degrees of centralization of authority, and staff- and client- dependence and alienation; for the higher are any of those, the more that the central authority will consider close specification to be possible and necessary. Thus detailed objectives may emerge more readily in authoritarian organizational contexts, such as the military, or inside a corporation, or with a rich confident donor and a weak client; in some physical infrastructure and industry projects, less exposed to natural or human vagary; and for routine delivery of services.

When objectives statements are precariously negotiated simplifications and choices, in the face of changeable imperfectly known environments, then different occasions, different negotiations, will lead to different simplifications and positioning. Around the time of LFA's creation, experience with PPBS, a related managerialist approach, led Schick to warn of the ossifying presumption that there exists 'a unique configuration of objectives--the "program structure"--serving all analytic purposes', which can be captured in an organizational charter and enforced by the rational analyst. 'In reality there are many different purposes, perspectives and

classifications' (Schick, 1973:569-70).

The sharply defined, calibrated, targeted 'ladder to heaven' has been LFA's version of: 'The project mode of development, sometimes called "the blueprint approach", [which] assumes that it is possible to pre-determine a set of cause-and-effect relationships that will turn resources, knowledge or technology into desired and sustainable human change' (Fowler, 1995:145). But for example, developing country projects for longer term institution building often face difficulties even to retain staff; successful and trained personnel tend to depart and be hard to replace. To try to plan and evaluate such projects in terms of fixed output targets for within a project enclave can be an exercise in irrelevance (Hersoug, 1996). One response is to increase the project thrust: ever more conditions, components, indicators, reports. This brings no net gains when operating in peripheral dependent societies beset by macro crises. To manage is not to control, warned Landau & Stout (1979), even for the more favoured settings they wrote of.

Why state objectives?

Roles of objectives which LFA emphasizes are to point us in a good direction and thereby inspire efforts. Whatever the direction, simply having objectives gives some sense of purpose and encourages focusing of activity and mobilization of energies. Individuals and groups typically work harder with targets and goals. Within groups, statements of objectives can help integrate and coordinate. Finally, objectives provide criteria to assess performance and identify when adjustment is needed. This final role suggests that objectives be clear and precise. Some other roles, including motivating and integrating, sometimes work better with vague broad statements (see e.g. Hersoug, 1996). Room for manoeuvre too is reduced by high specification of objectives, yet effective action can require ongoing networking, adjustment and coalition forming (Biggs & Neame, 1995). Manoeuvre relies on general sense-giving principles of orientation, rather than on detailed, choice-denying, specifications.

A common tension in use of the logframe is that consensus or compromise on *precise* objectives may sometimes be more attainable for inputs, activities and outputs -- the levels which

should often be left more flexible to allow learning and innovation. In situations of trust, such flexibility is permitted or encouraged. In situations of low trust, objectives at all levels become largely frozen, felt by a self-important funder to be recipient commitments and duties which it must enforce -- not least the objectives at lower levels, since impact at higher levels is hard to demonstrate.

Whose objectives?

In MBO and its offshoots like LFA, organizations (and societies) can be treated as machines for execution of the intentions of a unitary central intelligence (Morgan, 1986), or as convertible into happy communities of like-minded folk. The European Commission's manual exudes unjustified optimism: 'A gathering of these representatives [of concerned groups and organizations] will arrive at a shared analysis... These methods...will lead to a single "image of reality"' (1993:18). GTZ similarly insist: 'The target groups must reach a consensus on the planned improvement in their life situation (which will be the development goal) and the measures necessary to achieve this goal' (1996:10). The quasi-Stalinist language reads oddly besides commitments to democracy, diversity and markets. Markets allow cooperation between those who do not agree. LFA proponents assume that projects must and can have detailed and extensive agreement.

In the absence of a consensus, we should always ask: whose objectives? 'Consensuses' that appear from officially convened gatherings tend to be the choices of the powerful, the experienced, the European language speakers (Chambers, 1996); choices which representatives of the weak, if present, will politely or prudently not openly gainsay, in order not to jeopardize their access to resources. One participant recalled though the quiet rage of a group of Jamaicans herded into a hall by a donor organization and forced to fill a pre-fixed project matrix's set of boxes, as a requirement for funding.¹⁴ Where staff and clients are less dependent, as skilled as the funding centre, and closer to project reality, LFA works better if planning is decentralized to offices and

14. A Jamaican at the 1997 Manchester conference on Public Sector Management for the 21st Century.

staff from the recipient side. More strength is shown and produced by empowerment than by domination.

A new context of use - logframes for negotiation and learning?

There are choices in how to use LFA, not a single embodied potential. Can it for example, to adapt Wiggins & Shields' phrase, evolve into a tool to ensure sufficient structure in more participatory process planning ?

Several lines of argument, besides commitment to democracy, can support a priority to discussion in using LFA: the problems in measurement, in attribution of influence, and in agreement on values and sometimes on basic concepts; and the need for planning which is better informed and accepted, and contributes to long-run strengthening by diffusing information and fostering capacity. Then 'accountability must be a process of negotiation among stakeholders rather than the imposition of one definition or interpretation of "effectiveness" over another' (Edwards & Hulme, 1995:12). We could assess versions of LFA by how far they recognize, accomodate and facilitate this 'structured multiple stakeholder involvement' (Fowler, 1995:150). Some try to do so, others not.

The line of argument is well known in other fields. Multi-criteria assessment methods have arisen for situations where uncertainty is high and yet decision-making has to be relatively open, participatory, and demonstrably reasoned and socially equitable, because multiple different stakeholders are mobilized and influential (Nijkamp, 1990). The prevalence of blue-print, top-down and non-dialogical variants of LFA in aid projects has reflected the power relations extant: funders are not accountable to recipients (Fowler, 1995).

A number of 1990s extensions of LFA bear the label 'Project Cycle Management' (PCM), including major versions by the European Union and GTZ. They accept that previous mainstream project planning and management, in which LFA was central, was excessively oriented to short-term delivery rather than to sustainability and to building of capacity and commitment. PCM tackles a series of logframe blind-spots and adds some realistic warnings on use and misuse,

unplanned impacts, and so on. It tidies up terms (notably by clearer meanings for Purpose), matrix layout, and linkages between project cycle phases. But whether the LF can be a tool of adaptation depends on profounder changes: more serious assumptions analysis, a wider range of discussants, and willingness to update. The project matrix can then be put in perspective, as just a means towards communication, negotiation, teambuilding, learning and reflection.

That the LF offered a means for greater transparency and debate, thanks to its compactness and visual linkages, was recognized earlier for exchanges within a funding agency. ZOPP added some participants from the recipient agencies. Seeking much broader participation, GTZ organized a 1996 workshop entitled "ZOPP marries PRA?" (Forster, ed., 1996). While ZOPP-ers tended to be keen on the marriage, most of those present remained sceptical.

...participants should [say PCM's proponents] be involved from the start... [including] all affected [, using] transparent decision-making and analysis ... On the other hand... there should be a solid plan.... [Development] should be clearly target-oriented. There should be pre-defined analysis and planning steps [and so on]... (Chambers, 1996:11).

PRA-ites felt that the heavyweight ZOPP mechanism almost inevitably remains dominated by the monied and powerful; and that no fixed, standardized planning and management approach is valid. Instead, after broad framework planning, periodic action planning should be left to implementers on the ground. ZOPP's defenders argued that, sensitively and imaginatively used, it can help in both planning stages. While most donors stuck to detailed, centrally approved, binding specifications of intended project outputs, activities and inputs, albeit now somewhat more flexible, GTZ has considered a 'minimum planning framework, limited to strategic goals and input ceilings and leaving as much as possible to a joint learning process during implementation, [which] might lead to much better results'.¹⁵ But to do this, the "planning culture" needs to be changed (Kielevitz, 1996), away from assumptions of a lack of capacity and/or trustworthiness of others, plus the masterful technical expertise and moral superiority of the funder-auditor.

GTZ and others are thus examining 'whether participatory learning approaches are

15. From GTZ's revised directives, cited by Kielevitz (1996:39).

compatible with the constraints of a management and steering system which is essentially based on the logical framework approach' (Forster, 1996:1-2). One should wait to draw firm conclusions about this third generation.¹⁶ For both first and second generations a dozen or more years were needed. Much of the proponents' commentary remains prescriptive and predictive as yet--from the good intentions of the revised methods, regardless of constraints, and from model cases under favourable conditions--rather than reporting actual sustained widespread success. One can hypothesize that just as first and second generation LFA in practice far from fulfilled all promises, the same will apply again.

6. CONCLUSION

The conventional logframe has assumed simple project systems, with simple causal structures and additive, separable external influences; plus simple, pyramidal, normative structures. The record of this impressively versatile, but highly simplifying, model is very mixed. LFA has a range of potentials, good and bad. Outcomes depend on which aspects are emphasized, on how intelligently and in what conditions LFs are employed, and whose servant they become. Figure 2 summarizes arguments from earlier sections. To compensate for imbalance in the existing literature it highlights important problems and dangers to be prepared against.

16. One can however hardly call some of the new variants still LFA. E.g. those by INTRAC (1994) render even problem analysis and objectives analysis optional.

Figure 2: Overview of strengths and weaknesses in LFA

THE LFA	OBJECTIVES AND POTENTIAL STRENGTHS	COMMON PROBLEMS	DANGERS
<i>About vertical logic</i>	<p>1) A synoptic, integrated view-- relatively thorough yet concise--of project objectives and activities and their links to environments</p> <p>2) Distinguishes stages/ levels in temporal sequences and value hierarchies</p> <p>3) Encourages examination of interconnections and assumptions</p> <p>4) Encourages attention to wider significance and justifiability</p>	<p>a) In clarifying and gaining consensus on objectives</p> <p>b) In interpreting and applying the terms for different levels</p> <p>c1) In linking activities to higher goals in one diagram</p> <p>c2) Obscure time dimension</p> <p>d) In reducing objectives to a means-ends chain</p> <p>e) In trying to define only one Purpose and Goal</p> <p>f) Neglect of assumptions analysis</p> <p>h) In understanding causation; interpreting meaning of the links</p>	<p>i) Hides disagreement; imposes views of a power-centre</p> <p>ii) Overlap of different levels. Tautology and success-by-definition.</p> <p>iii) 'Jamming' and over-aggregation, especially at higher levels</p> <p>iv) Neglect of process values</p> <p>v) Oversimplification of objectives and design</p> <p>vi) Ritual of validation by superficial assumptions analysis.</p> <p>vii) Neglect of alternatives; rigidification of design</p> <p>viii) Ignoring or downgrading unintended effects</p>
<i>About horizontal logic</i>	<p>1) To give measurable, operationalized reference-points for use in appraisal, management, & evaluation</p> <p>2) To deepen examination of meanings of objectives</p>	<p>a) To obtain practicable, valid, quantified indicators, especially for higher levels and for 'social' types of project</p> <p>b) To separate out the influences of complementary factors</p> <p>c) To balance standardization of monitoring with retention of its 'intelligence' function</p>	<p>i1) Downgrading of less quantifiable objectives; ii2) excessive focus on lower levels</p> <p>ii) Confusion of indicators & targets</p> <p>ii) Invalid use of gross outcomes as indicators; mis-handling co-determined effects</p> <p>iv) Fetishization of imperfect indicators</p> <p>v) Tunnel-vision</p> <p>vi) Distorted incentives</p> <p>vii) Rigidification, or disproportionate work to find and update adequate indicators & targets</p>
<i>About format and application</i>	<p>1) Visually accessible; relatively easy to understand</p> <p>2) Shared focus for different parties</p> <p>3) Matrix can and should be systematically linked to situation analysis</p> <p>4) Can be applied in a more participatory way</p>	<p>a) Assumptions analysis is physically marginalized</p> <p>b) Pressure to use a pre-set format</p> <p>c) Prepared too late</p> <p>d) Often hard in practice to update</p> <p>e) High demands for training, judgement and motivation, if a simplifying method is to be applied sensibly</p>	<p>i) Distortions if precisely the same format is applied to nearly all cases</p> <p>ii) If a partial summary is fetishized as the whole truth</p> <p>iii) Can deaden thought</p> <p>iv) Can stifle adaptation; lock-frame</p> <p>v) Can exclude those without particular training and styles of thought</p> <p>vi) Can become a method for enforcement of one (dated) view, for one-way accountability only, and thus alienate staff</p>

We found it important to differentiate aspects of LFA, as separable and with different implications. Measurement, the 'horizontal logic', is a more perilous and secondary aspect. Solem's dictum that 'the basic power of the logframe remains...its ability to show causality in the Project Structure Column, and dependency on exogenous variables in the Assumptions Column' (1987:17) concerns the vertical logic. This too contains conundrums and limits, but has important capacity to help clarify and communicate issues. Its insistence on a completely unified system of objectives has an illiberal potential, but the framework can provide a discussion-field, not least through the assumptions column(s).

Any algorithmic set of rules for handling problems is meant to help people think about cases and conditions, but may lead them to not think. Logframes can help if they encourage systematic consideration of issues and difficulties in a pluralistic and uncontrollable world, not if they give an illusion that the difficulties are unimportant, or bring rigid commitments to what are merely indicators or to mistaken or outdated targets. Weighing the method's costs and benefits depends on various factors: how much faith one has in people's unaided thinking; how important are the variations between cases and hence the dangers of standardization; and how rigidly people will use LFA, when operating in conditions where they should continue learning and adapting.

Evaluation of such a protean entity must beware of an essentialism which seeks to find LFA 'basically good' or 'basically bad'. In the former case, credit is given for helpful contributions - yet all limitations are excused. 'The logframe tool itself is good; problems with it are from misapplication by its users' (Solem, 1987:26); 'Use of this term ["disadvantages"] implies seeking in the matrix attributes which, though essential to planning and analysis, the LogFrame was never intended to possess' (MacArthur, 1994:100.) Another standard escape hatch is training: X is basically good, we only need more (and more) training. Consider though the dense problems tree drawn by Dewint for the introduction of ZOPP into the Belgian aid administration. In LFA terms, the method's high requirements (if it is to generate significant gains) is a non-reformable parameter. Ability to meet those requirements--for time, skills, organizational commitment, and effective demand for careful analyses--is an assumption in any 'project' to introduce it.

Sometimes it may be a 'killer assumption', when the requirements for fruitful large-scale use cannot be satisfied.

We require non-essentialist assessment, distinguishing different contexts, versions and criteria. Of particular concern is: under which conditions does LFA help to counter Robert Michels' warning that 'organization means oligarchy'? and in which cases does it instead promote that danger? To date, LFA has predominantly been a tool of the powerful. Funding organizations' manuals extol its virtues. The difficulties that ordinary users encounter tend to be downgraded: the organization apex consciously and unconsciously softens critical reports, which anyway have limited circulation and largely derive from agency staff rather than from (yet more critical) recipients; while juniors and recipients mark their words carefully, and sometimes assume that their problems reflect incompetence or misfortune, since they read--in attractive, purposeful, confident manuals--of smooth and successful applications elsewhere.

The log-frame rose and declined in popularity in USAID and elsewhere during the 1970s and '80s, and in its ZOPP version in GTZ and elsewhere in the '80s and '90s. The newer improved variants should be taught and used with the lessons of that experience in mind. The 'something is better than nothing' criterion remains valid (when the something is good, and sensibly used), but we will be looking also for more than that, both in LFA performance and in the degree of refinement in its assessment.

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