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Viewpoint – Development or Disbursement – Vested Interests and the Gulf between Theory and Practice

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ABSTRACT: In almost 40 years of working in irrigation development and water resources management, I have noted a considerable inconsistency between development theory and the overwhelming need to disburse on the part of typical international financial institutions and development partners. In addition, the symptoms are apparent at every stage of a typical investment cycle. This essay cites first-hand examples to support my hypothesis.

KEYWORDS: Planning, identification, feasibility, appraisal, evaluation, disbursement, development bank

INTRODUCTION

It is rumoured that on completion of his masterpiece, the Petite Messe Solennelle, Rossini joked that he may have committed a mortal sin in making so light of the sacred musical form. Given the subject matter here I fear I may be doing something similar, except that I am not joking because I may well be biting the very hand that feeds me. But if anything has been learned in almost four decades working internationally in the irrigation/water management fields it is that there is a big disconnect between development theory and disbursement practice. Using real examples to support this view, the essay set out below takes the reader on a journey through a hypothetical investment cycle from sector planning, through project identification and preparation, feasibility study, pre-investment appraisal to ex-post evaluation. On the way, despite the arrogance of some of the players, we will find it sometimes turns out to be all-right anyway. But this may be due an unexpected externality – more to luck than judgement as it were. We will also note a curious dichotomy between the standard expectations of feasibility studies ('couldn't be better') and ex-post evaluation ('could not have been worse'). In my experience it is sometimes the other way around.

Sector planning

Tanzania's National Irrigation Development Plan, which I helped prepare and promulgate with the support of FAO in 1994 was an honest attempt to break away from the old master planning paradigm. Such master plans usually comprised shopping lists of schemes selected and prioritised by Governments often in the context of political agendae. These of course were becoming increasingly unpopular with development partners, especially as their priorities swung away from water sector infrastructure, towards health and education. But instead of a shopping list, Tanzania's National Irrigation Development Plan (NIDP) provided a negotiating space within which projects or programmes could be identified in a way that acknowledged the interests of all concerned. What is more, it was regionally specific and was based on strengthened participatory processes.

The World Bank was quick off the mark with its River Basin Management and Smallholder Irrigation Improvement Project (RBMSIIP) which sought to establish integrated management solutions in two of

the country's most stressed basins: the Rufiji and the Pangani. The best part of a million dollars was made available during preparation to cover the costs of exhaustive community consultations, socio-economic baseline surveys, the establishment of a large database and a convincing multi-criteria analysis (MCA) based in no small part, on community demand.

According to the Implementation Completion Report, household incomes at the smallholder irrigation schemes rehabilitated and upgraded by the RBMSIIP increased by some 300% and irrigation service fee collection ratios rose to 90% plus!

But then at the beginning of the millennia, some new kids arrived on the block!

Using criteria that would have produced similar results if applied to Antarctica (low precipitation, low food security and low socio-economic connectivity), JICA concluded, in its National Irrigation Master Plan (2003) that Tanzania had some 29.2 million ha (Mha) of irrigation potential, of which 2.1 had high potential, 4.8 had medium potential and 22.3 low potential and backed this up with a huge old style shopping list of ranked schemes around the country (JICA 2003). And this played right into the hands of the newly elected president in 2006, who enchanted by the NIMP and the political gesture that it offered, demanded 1 Mha of irrigation by 2012. Since the country had, around 0.25 Mha of functional irrigation, this would have taken a cumulative annual expansion rate of just under 26%. According to calculations carried out during preparation of the joint AfDB/FAO report prepared for the African Union Summit of July 2005 (Riddell 2005), the highest rate of growth in sub-Saharan Africa in the period 1995-2003 (the period covered by FAOSTAT at the time) was just over 21%. This was in Ghana where the expected productivity and sustainability of the sector have proved to be highly elusive. Also, at much the same time, FAO's Water Resource Paper No. 31 (Riddell et al., 2006) showed that the region as a whole could absorb only around 700,000 ha of irrigated production by 2015!

Sadly, as we will see below in the section on Appraisal, despite the compelling and unequivocal success of the consultative, demand-driven and MCA based approach used for its RBMSIIP, the World Bank itself got caught up in the NIMP feeding frenzy. But before proceeding, it is also interesting to note that in a similar master planning exercise for neighbouring Zambia, JICA recommended a suite of rice projects that were 'economically justified' at investment costs/ha around the $90,000 mark. Economically justified indeed for a country with a highly subsidised rice sector, and domestic production costs reportedly around 700% of world averages.

Another little titbit to amuse us before pressing on concerns however, the 2001 Bangladesh National Water Management Plan (Halcrows/World Bank, another framework style planning approach with $18 billion bill worth of sector plans, without a single specific project being specified and hence no shopping list). It happens that I was Chief Planner for this, an assignment which was truly enjoyable and which remains one of the high spots of my career. The Bank was generally very encouraging and supportive throughout, but two things do stick out.

First, as is sometimes the case, the Bank appointed something approximating to an expert panel. One of my tasks as Chief Planner was to take a look at the historic water development and management role played by the private sector. A possible approach for this was discussed and agreed with a member of the expert panel, whose advice was sound and well focused. On seeing the result of this particular piece of work, he sent a memo saying that the analysis was "excellent". Strange therefore that when he saw exactly the same text in the draft final report he said words to the effect that "this is complete garbage". The temptation to staple the two memos together and ask if he saw any inconsistencies between them was irresistible.

I am still waiting for a reply.

Before moving on to the second titbit, it is necessary to note that my role as planner required me to stand on the shoulders of giants that had spent around $3 million of the Bank's money doing the preliminary research over a period of several years. My role and that of my team was to spend around another $0.5 million, pulling it all together into the sector plan. The draft final report, comprising

several volumes covering some 1400 pages, was presented to a formal workshop some eight months into the planning stage. The Bank's Task Team Leader responsible for overseeing the Plan's preparation turned up four hours late, and breathlessly explained: i) that he was rushing to catch a plane; ii) that he had not read anything but the first few pages of the Executive Summary; and iii) "this is what the World Bank thinks". This was clearly an outrage and I interrupted loudly to tell him so. His reaction went more or less as follows: "I am a World Bank Official and nobody talks to me like that" – a pause – and then "but, you are correct, how can I best help finalise this huge piece of work". And help he did. He was a complete gentleman and with his support we were able to issue the final document within weeks. Would that all Bank officials were like him – but as we will see below, they are not.

Project identification

Development theory suggests to us that project identification should be predicated on need rather than opportunity, and ideally based on beneficiary demand. This is not a hard and fast rule. There are times when a top-down approach is justified, especially where there is a regulatory element (and let us not forget that irrigation management transfer is usually initiated to benefit governments, and/or as a result of donor pressure). Of course, a lot depends on what we understand by 'need'.

In the early 1980s, Tarmac, a UK based construction colossus, found itself holding massive pre-tax profits and decided that, instead of paying taxes, it needed to invest in a Build Operate and Transfer style, multi-purpose storage project in Sumatra's Jambu Aye River Basin. An odd little side story on this is that the venture was supported by Margaret Thatcher under her 'Aid for Trade' initiative at the very same time she was loudly castigating the Japanese for their very similar, but more public support for the Bosphorus Bridge.

I was recruited as a very minor cog in the project preparation machine. The first mission was financed from a business development slush fund, and hence there were no limits on one's expense account; in fact, we were told to spend as much as we could – and we did. But as the investment concept began to firm up, so did our expense account limits such that in the hotels where we occupied suites during the search for a project, we stayed in cells behind the boiler rooms as it were, once the feasibility study began.

As it turned out however, it proved very much easier to find a dam than to find any use for it. Hence over the course of two years and multiple missions, I was tasked with finding any takers for the dam's water. The problem was that all the irrigation potential in the basin itself was pretty much taken up and doing well. I was therefore instructed to find unrealised irrigation potential in adjacent basins, as well as opportunities to use the dam's water to maintain optimum salinity levels in the prawn farms littered along the brackish margins. Admittedly, the prawn farms did represent convincing demand for freshwater, but I do not think anyone in his right mind today would spend day after day tramping through pristine rainforest looking for the odd parcel of land that, with pumps, pipes and other inter-basin paraphernalia, could be irrigated – if anyone could be found that wanted to go there to farm it!

And despite the potential represented by the prawn farms, at no stage was any attempt made to establish whether or not there was any grass-roots demand for the venture. It seemed that the only parties needing the deal were Tarmac and the Thatcher Government's foreign policy.

Regrettably and to my shame, I have no idea what happened next, except that Phase 1 of the project seems still to await implementation and is considered as having no special priority (ERIAE, 2010). But its status is not the issue here, rather we are talking about a planning approach based on solutions looking for problems, with no effort spared to find such problems. This must sound familiar to at least some readers.

Project/programme preparation

So then, having prepared our sector plan, and having found our opportunity, it is now time to prepare it. And at this point a new player takes centre stage.

The Chhattisgarh Irrigation Development project (India) was predicated on the need to upgrade the State's smallholder irrigation sector, to which end the Asian Development Bank provided an adaptive programme loan. The terms of the loan were specific and relevant. Typical schemes were in very poor repair, characterised by low distribution uniformity and minimal flow measurement/control facilities: they were often very inaccessible moreover, and yields were abysmal. A three pronged approach was established for the purpose of preparing the schemes themselves. There was an overall management unit; a design unit and a third unit to advise on and facilitate user participation and irrigation water management. I was a small part of the last unit, and – among other things – my job was to ensure that scheme designs met the requirements of the loan. This proved largely irrelevant, but before seeing why this might be so, it is interesting to understand the discouraging institutional environment in which the ADB was happy to disburse its cash.

The first give-away would be the Water Resources Department (WRD) itself (irrigation development and to an extent operation and maintenance are the responsibility of state-level WRDs). Throughout its entire HQ in Raipur the WRD's walls were plastered with photographs of large civil works in progress; lots of dams, weirs and major canals etc., but not a single one showing farmers, or even the minor canals that serve them.

Secondly, Chhattisgarh had just promulgated its Farmer Managed Irrigation Act, not perfect as a piece of legalisation, but certainly a promising game-changer with several important implications for the WRD's senior officials and engineers. At every possible opportunity during my extensive travels around Chhattisgarh, I asked every official I met whether or not they had read the Act. Not a single one claimed to have done so, and all said they had no intention of doing so.

This attitude is explained by the utter disregard typical department engineers and officials have for their farmers. The World Bank talks about the need for buyer-seller relationships in the water sector. The milieu into which the ADB was pouring money could not have been further than this, as our third example confirms.

A mid-career irrigation engineer had just been given responsibility for a scheme, the water user association of which we had been working with. We thought therefore, that it would be a good idea for the engineer to spend a day with us at a meeting of the association. With some difficulty we extracted him from his office and took him to the field. On arrival, he refused to meet any of the members, but instead marched 100 m or so up the road where he spent the entire day sitting pointedly with his back to the farmers. I could also mention a scheme manager who had been in place for eighteen years, but who did not know how long his main canal was; neither could he find a design drawing that might have answered the question.

But for the ADB, the objective was clearly to disburse, regardless of the ability or wish of the 'client' to spend it as intended. None of the scheme designs that made it out the door made any attempt to introduce water management infrastructure despite endless attempts by our unit to change that. And the bank seemed not to mind even when the state decided to spend the bulk of the money on a single large 'prestige' scheme rather than the myriad small schemes desperately in need of upgrading.

There is an especially telling coda to this story. From 2002 to 2004 I was Team Leader of the Madhya Pradesh IWRM Strategy study – another enjoyable assignment with great Indian counterparts. The study however, was something of a chimera, in that although it was financed by means of a DfID grant to the ADB, the output was intended to provide guidelines for a World Bank follow-on project. At the time, the State of Madhya Pradesh had just divided into two, with the new state of Chhattisgarh being the result. Shortly before the end of the Madhya Pradesh study, the ADB desk officer told me privately,

that his bank was going to do whatever it took, by hook or by crook, to make sure that they, not the World Bank, got the business in the new state.

Well that they did, but it is still not clear to me whether the ADB official was blowing a whistle or declaring war!

Feasibility studies

It was intended that the individual Chhattisgarh schemes were subjected to scheme-specific feasibility studies, which brings us conveniently to this section of the essay.

The first presentation I ever made took place in the early 1980s when I was invited to speak on a subject of my own choosing, to a graduate school seminar on development economics at the UK's Southampton University. There was no logic to that, I am not an economist (although economics and econometrics were included as modules in my own graduate school studies at the same university), but by then I had participated, with increasing cynicism, in several feasibility studies. I therefore took as my subject 'Is there any such thing as a feasibility study?' because it had become clear to me that an acceptable feasibility study was required not to question the desirability of the project in question, but rather to congratulate the donor involved by confirming that it could not have chosen a better project in a better place. An interesting example that illustrates why this is so would be the feasibility study of the Mitunguu smallholder irrigation scheme in Kenya, financed by KfW but carried out in 1978 by a team of British consultants, of which I was a very junior member.

The Mitunguu scheme was a highly extensive scheme situated to the East of Mount Kenya. Its members lived a very humble life, largely growing maize and tobacco, irrigated from small channels scratched in the dry red earth to carry water to their widespread plots. After due consideration of all the issues, our study concluded that the only way that upgraded irrigation would be feasible would depend on land consolidation. Our team's sociologist felt that this would not be a good thing. Now, this is not about the pros and cons of land consolidation, but KfW, clearly wishing to disburse, decided to reject our study and commission a new one. Our replacements arrived at exactly the same conclusion as ourselves, except that they thought land consolidation would be the best of all possible ideas, hence delivered the feasibility study that KfW wanted.

And speaking of rejected studies, I am reminded of the feasibility study into the so-called Windblown Sandy Wasteland Project in China's Xiangxi Province. Carried out in 1989 the study was financed by the EU and was great fun, notwithstanding the utter impossibility of calculating a meaningful EIRR which varied from +20% to around -20%, depending on whether or not imports were priced in Yuan or Renmimbi, and whether or not the shadow prices of steel subsidies were accounted for etc, etc. But no one cared, the Chinese being such wonderful hosts.

The point is that when we all got back to Brussels for the de-briefing and our Team Leader presented our findings, the desk officer responsible said "I reject everything". The Team Leader responded by asking politely whether or not the desk officer had read the Terms of Reference, when the officer replied "I wrote the Terms of Reference". The Team Leader then made it very clear that we had followed the ToR to the letter. The desk officer's response: "I reject the terms of reference, go and do it again, I will pay". At that point, our Team Leader very wisely made it clear that we would be delighted to do it all over again, but the result would be the same. So our study was accepted and the development funds released to our wonderful Chinese hosts, who promptly took the cash and disappeared!

But back to the extent to which donors are interested (or not) in genuine feasibility studies.

It was my great privilege from 1996 to 2000, to be Team Leader of Danida's Support to Water Resources Management Project – Phase 2. Largely centred in Dak Lak Province, the project had four components: extension, micro-credit, irrigation and general rural development and was focused largely in Vietnam's Southern Highlands where there was an increasingly urgent need to pay back the huge

environmental costs accruing to uncontrolled deforestation to make room for coffee. It should be noted that I have nothing but respect for Danida, its policies and guidelines are convincing, as is the dedication and competence of the experts that it mobilises into the field. Generally speaking the project went well, but I delayed implementation of the irrigation component (which included rehabilitation, upgrading and expansion of smallholder irrigation schemes) because of serious doubts about hydrology, general feasibility and scarce political commitment to farmer-managed irrigation at the provincial level. But the component comprised a huge chunk of the project's budget and of course Denmark was committed to spending 1% of its GDP on development assistance. Accordingly I should not have been surprised to receive a very robustly worded letter from the Danish Ambassador saying more or less "I know that you have serious concerns about the feasibility of these schemes, but you will implement them nonetheless and you will begin to do so immediately".

This story too, has a coda, but for that the reader must wait until the next section, because it is, at last, time to introduce the small pieces of good news promised in the introduction.

No one in the 1970s anticipated the horticultural revolution that was to take place on the slopes of Mount Kenya in the 1980s. Had we known about that, our feasibility study may have followed a very different course. A shift to the production of high value horticulture lifted many of the farming households out of poverty, some even affording pick-ups, albeit beat-up pick-ups in many cases, to convey their produce to the higher grade markets in the cities.

And as far as the Dak Lak schemes are concerned, it was an enormous pleasure to return to see them last year after an absence of over ten years. Although they were predicated on the need to secure rice harvests by a combination of both irrigation and drainage, they are now irrigating a wide range of high value crops including feed maize, ginger, coffee, pepper vines etc.; the farmers have prospered and the infrastructure is in an excellent state of repair and has remained so under farmer management. Unfortunately, it has not as yet been possible to identify why they have been so successful: but it is tempting to conclude that the extensive community consultation, sensitisation and training that we insisted on, despite the memo from on high, may have had something to do with it.

Pre-investment appraisal

Once the project is prepared and the feasibility study carried out, it is time for pre-investment appraisal, and for this we will turn to the appraisal of the World Bank's Agricultural Sector Development Project in Tanzania, 2006.

Until a matter of a few weeks before appraisal, the ASDP had been largely targeted at the need for strengthened extension and other support services to be delivered via district development plans, and as such was a modestly priced, appropriate and well-designed programme that had been gestating over several years. But as we have seen, Tanzania's new president was enchanted by the prospect of implementing the first 1 Mha of the NIMP during his incumbency. It was therefore decided just before appraisal to include that 1 Mha in the ASDP and it was my misfortune to have been co-opted to the appraisal team by FAO's Investment Centre in order to cover the new irrigation component.

Well, it became clear very quickly that the ASDP was not an appropriate instrument for any large irrigation component, even if the 1 Mha dream had itself been valid. First, the 1 Mha would have been selected from high priority schemes ranked in the NIMP. This would have been in direct contravention of a cross-cutting ASDP principle which required that every investment made under it must be clearly demand-driven. In addition it would have meant picking off countless schemes distributed widely (and in some cases, inaccessibly) around the country. Secondly, all ASDP disbursements were to be made through the districts via a three-tiered system of grants the two largest of which would be conditional on the pace and status of civil administrative reform. This included cash for the irrigation schemes which was problematic because it implied water allocations that would be justified not on IWRM grounds, but on whether or not a district council had filled in its forms correctly. This problem was

exacerbated moreover by the fact that although Tanzania's water could be freely allocated between most water using sectors, once allocated to the agricultural sector it could never again be allocated outside of it. Thirdly, although the amount of cash expected to be made available for non-irrigation ASDP activities would generally be within a qualifying district's ability to disburse, the vastly greater budgets involved in irrigation expansion most certainly could not be.

I really did my best to point this out, but was told to save these issues for the irrigation policy studies I was about to lead for FAO a few weeks after completion of the ASDP appraisal. So after agreeing a suitable form of words (largely concerning the need for the right indicators) I signed off my contribution to the appraisal exercise.

Three weeks or so after the appraisal, I returned to Tanzania where I was able to raise my concerns during the start-up workshop of the irrigation policy studies. Thinking that I was adequately mandated to do so – even by the Bank – while stressing my strong belief that modest irrigation expansion was a timely and genuine opportunity for Tanzania, I raised my concerns about whether or not the ASDP was the best vehicle for expansion of the sector. In so doing I questioned the validity of the NIMP's top-down orientation, and the disadvantages of implementing dozens of small schemes all over the country, as compared with the economies of scale offered by a programme approach. This latter point was entirely consistent with the recommendations of a very compelling World Bank funded study that I had just read (Inocencio et al., 2006).

Oh dear, talk about lighting the blue touch paper and retiring immediately!

A few days after the workshop, the FAO Desk Officer and I were summoned to the World Bank where it transpired that a JICA intern had been to complain that "FAO is saying horrid things about our NIMP". I clearly remember the words of the Bank official who actually said "Shame on you, don't you know that large schemes are unsustainable". Despite having very limited understanding about irrigation, his arrogance simply would not allow him to listen when I tried to point out that I was not talking about large schemes, but rather the very programme approach that the Bank itself was calling for in peer-reviewed, published reports. Rather than listen he went on to initiate a formal complaint against FAO and demanding a high level apology (which he got), while demanding that I was blacklisted by FAO and anyone else that would listen. FAO's response to that was extremely wise and very loyal. Basically they said, why not ask the Tanzanians what they think? And although this is not on record, I am assured by a very senior official of the Irrigation Department at the time that the Tanzanian said, well we have known Phil for 20 years, while the Bank guys have just got off the plane, we will stick with Phil's advice. It worked, regardless of whether or not it was a genuine response to the crisis, or rather to have a consultant scapegoat standing between the Office of the President and the Irrigation Department (which acknowledged that the 1 Mha dream was ridiculous and was looking for anything to discredit it). The Bank therefore hired an independent consultant who said more or less what I had, and after the dust had settled, the irrigation component was removed from the ASDP.

But what made this particularly disgraceful was that while standing by silently when I was being publicly hung out to dry by the Bank, a senior in-house member of the Bank's ASDP appraisal team emailed privately to thank me for "raising these important issues".

It doesn't matter, we eventually kissed and made up, and I am once again doing interesting and challenging work for the Bank. But yet again, there is a coda.

The ASDP was intended for multi-donor basket funding. So participants at the appraisal mission wrap-up workshop included representatives from several of Tanzania's development partners, including Danida. When the 1 million ha dream was introduced almost as if set in stone. Danida's representative almost had a conniption fit saying that "Danida does not agree with or support irrigation". I really had to bite my tongue because the ambassador demanding irrigation at all costs in Vietnam, actually went on to become head of Danida, in part perhaps, because our irrigation projects increased his ability to spend his share of the magical 1% of GDP.

You couldn't make this up could you?

Evaluation

At this point along the investment cycle we should be looking at implementation. However and to my shame, I must confess that my experience of actual project implementation is pretty much limited to four years at the very beginning of my career; my leadership role in Danida's Support to Water Resources Management; and certain aspects of the Chhattisgarh project, and I have said all I have to say about those. Perhaps the reader will therefore forgive me for skipping implementation and moving straight on to evaluation.

We have already noted that it is almost a cardinal sin to question a scheme's feasibility. It seems also to be the same if concluding that a project or programme has been well implemented, the expectation generally being that something must be wrong.

Unlike implementation, I have a fair amount of evaluation experience covering programmes financed and/or implemented by Development Finance Institutions, ICRISAT, the EU, FAO/UNDP, international conservation organisations and NGOs. In some cases some things have gone well, and in others not so. But once in a while a project or programme appears that is genuinely exemplary, or at least convincingly close to best practice. Yet favourable evaluation reports accruing to good projects and programmes are often received with complete incredulity. For instance, I was a member of a two-man team evaluating a Dutch-funded rural development programme in Kenya being implemented by the Salvation Army in the mid-1980s. Neither my team member, nor myself could find anything substantive to complain about. The programme was on time, on budget and on target, its benefits were clearly demonstrated everywhere it got involved and its step-wise, participatory, household and school-based approach laid the foundation for a sustainable future. Yet when we delivered our draft report we were told it was unacceptable until we found something wrong (at which point, it was tempting to wonder why it had been funded in the first place, if the donor was expecting a disaster). In the end a meaningless compromise was adopted along the lines that the Salvation Army's personnel management practices were not completely compatible with the programme's long-term prospects.

This reinforces my emerging view that there seems to be far greater willingness to accept that things will go well, rather to believe it when they do. I do not want to end this essay on a pessimistic note however, so while still on this theme, will close with a recent example of an evaluation which also concluded that although a programme had been well implemented, there were some problems on the disbursement side. It concerns the irrigation component of the World Bank funded Mindanao Rural Development Programme Phase 2, which I was asked to 'assess' early in 2012.

In simple summary, I concluded that the programme was generally well implemented by a competent, hard-working and dedicated team of locals. The physical interventions were highly participatory and demand-driven, with demand itself being generated and processed by local governments on the basis of public announcements concerning the available financing; and convincing community sensitisation. In addition, the communities had functional water user associations, usually with paid staff and demonstrable internal processes to deal with fee and other manifestations of member delinquency.

But there was a problem.

My ToR – *inter-alia* – specifically asked me to assess the standard of the individual scheme feasibility studies that were used to justify specific investments. Frankly they were dreadful. But it was clear to me that the real problem was not that of the studies themselves, but of their appraisal which not only did not always justify the Bank's investment but also suggested the need for a significant capacity-building opportunity that the Bank had missed. This point was made clearly in my report; but this time, instead of causing me trouble, the Bank's response was very positive, and I quote: "thanks again for your excellent work on this. The World Bank was very happy with the result".

So perhaps we are making progress?

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