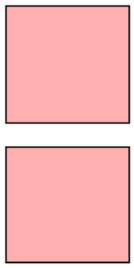


How to work with INDICATORS

A collection of typical objectives in VSD/TVET projects and programmes with sample INDICATORS of success

1

Introduction

Indicators [1] add measurable targets to objectives. Objectives which are formulated in general language ("narrative"), need indicators in order to become specific. Only objectives which are specified by means of indicators are manageable, can be used to negotiate staff performance and responsibilities, can be monitored and become an object of accountability. Sloppily formulated objectives (such as "better employment") lack such qualities, and their accomplishment is almost always certain with little or no effort. Good indicators are based upon **s**takeholder dialogue, are **m**onitorable, **a**ttached to a strategic objective, **r**ealistic and thus achievable, related to a **t**arget group and have a **s**chedule for interim milestones and an end-of-project accomplishment (expressed with a 'SMARTS' acronym).

Project objectives are typically arranged in a strategic array (called 'logframe' or 'results framework') where they express a 'ladder' of means and ends. It is common practice to work with three levels, where a high level **GOAL** [2] addresses an overall desirable development, which often serves as political justification of a project or a programme. In Switzerland's development strategies goals are related to poverty reduction, justice and equality of (hitherto) disadvantaged groups of people.

OUTCOMES are the intended effects which describe the advantages which a target group (beneficiaries, clients, users, right holders) shall be able to realize. In SDC' strategies, outcomes are related to improved gainful economic activity, higher household income and improved living conditions.

OUTPUTS are the services (or goods) which are to be provided to a target group. They are deemed necessary or at least helpful for the target group to bring about the intended outcomes. In SDC's strategies outputs center around enhanced competencies, employability[3], and the generation of business opportunities. It is often useful to distinguish between two kinds of outputs:

1. Direct *DELIVERABLES* as the final and immediately useable services which the target group is entitled to obtain (free or for a fee); in VSD projects the deliverables concern typically training measures (programmes, courses or learning at work, encompassing complete cycles (all the way from admission to certification) and job placement services, whereas
2. *INTERNAL RESULTS*, are the provisions, facilities and intermediate steps needed for successful delivery. Typical recipients of internal services are teachers, managers, developers etc...

1 In logframe terminology: "objectively verifiable indicators" (OVI); in other management tools often called "Key Performance Indicators" (KPI) or "Key Success Indicators".

2 Goals are far reaching and a single project or programme normally just contributes to the goal. Goal achievement needs concurrence and synergy of several projects, policy measures and other contributing factors (often outlined as assumptions).

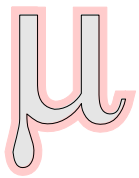
3 In international labour statistics employment is used as a comprehensive term encompassing wage-employment, self-employment and productive work of helping family members. The crux of the 'official' employment categories is that they do not contain a quality element and thus cannot bring out problems of under-employment, precarious or abusive employment.

2

A further breakdown of outputs will lead to **ACTIVITIES**. Activities do not get indicators, but are specified by duration, dependency and the allocation of resources. [4]

In the following tables we will provide sample objectives for different types of projects along with a number of suggested indicators. We will distinguish TVET (or VSD) [5] projects according to their level of intervention:

Micro-level projects

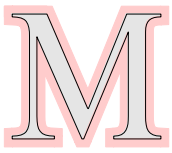


provide direct training services (through a school, center, training-on-the-job or a combination of different learning venues); micro level projects may work with one or several providers; programmes or courses can be formal, non-formal or informal; they can be geared to school leavers, to working persons or to unemployed or underemployed job seekers; training purposes can be initial employment (wage employment), self-employment, re-employment (after re-training) or an employment career or promotion (as a result of further training).

Meso-level projects

provide services to training providers as inputs to the training process; these can include occupational standards, programme development, staff development, regulations, accreditation, assessment, funding, blue prints of training venues, or linking and matching services. Typically meso level projects operate for the benefit of all or a specified sub-group of providers; the services could be free of charge, subsidized or be available at market prices. Providers may be compelled to make use of such services or request them voluntarily. Meso level projects offer the tools for QUALITY ASSURANCE.

Macro-level projects



improve strategy and frameworks under which meso- and micro level providers operate; they may pertain to policy formulation, legislation and regulations for the sector. In more concrete terms they can address such issues as strategic planning, the development of national qualifications, of overall funding instruments and the installation of regulatory bodies. Often macro-level projects aim at the harmonization of TVET historically grown "patchworks" across various ministries, the corporate sector and donor agencies.

Often (but not necessarily) TVET programmes combine projects on different intervention levels in order to generate a more consistent direction, unleash synergy and remove obstacles and bottlenecks.

[4] Activity planning will lead into the realm of project planning (as is evident in GANTT charts and network diagrams). Here, strategic objectives should appear as milestones, and indicators should help define interim milestones so that the networks are well structured (with branches and nodes) and allow planners to with a critical path approach (CPM).

[5] The term VSD (Vocational Skills Development) is used by SDC. It refers to a broad-based, flexible approach to promote the development of vocational skills and competences which can be acquired through different pathways: through school-based and workplace-based education and training, within and outside the formal education system, including a modular approach that is context relevant e.g. practice in the workplace and self-learning. At SDC VSD it is conceptually broader than TVET (or VET). TVET is used as the more comprehensive term, spanning all types of technical education and vocational training (formal, non-formal and informal) and including all relevant ISCED levels (up to level 4, but excluding tertiary education). VSD, with its typical focus on non-formal or informal delivery and its focus on lower ISCED levels, as to express inclusion, equity and sometimes special measures to admit, sustain, graduate and follow-up disadvantaged target groups, is regarded a subset of TVET.

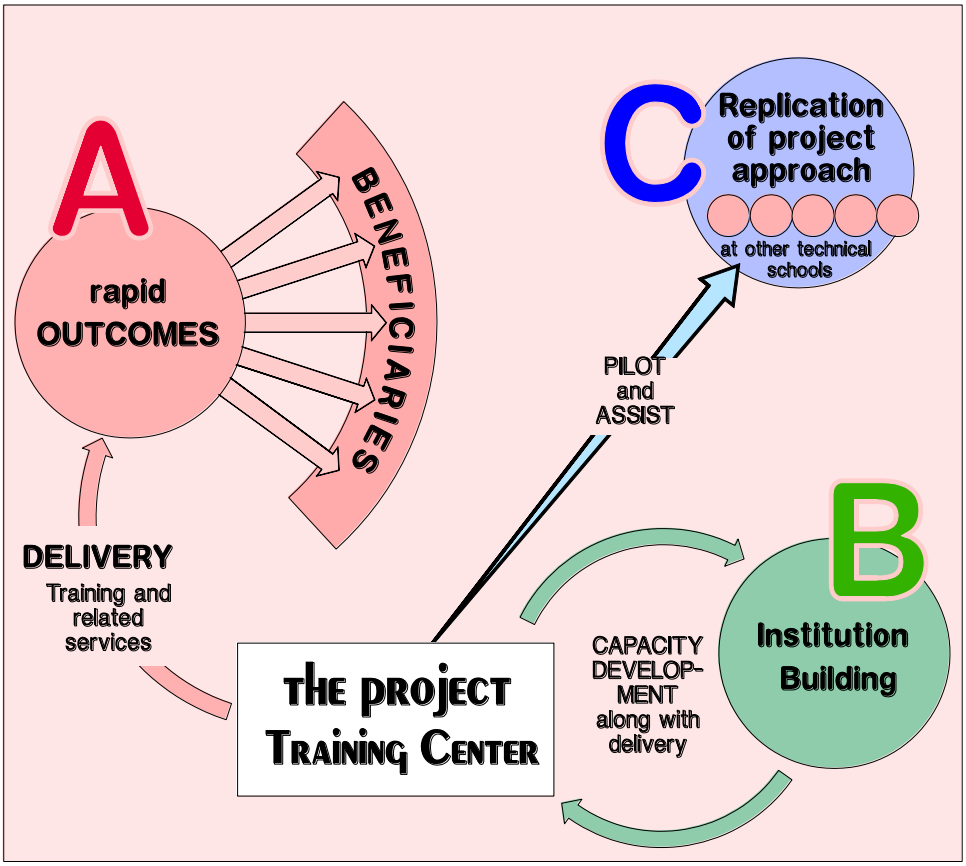
3

Apart from the macro-meso-micro paradigm we propose to classify projects according to their thrust in the following way:

A. Most projects aim at an immediate outcome for specified target groups. **Training delivery** in order to increase trainees' chances of (safer) employment and (better) income is the focus of such projects. Such projects are characterized by short "gestation" periods, i.e. the time it takes from the start of the intervention until the first batch of trainees is turned out.

B. Other projects use a longer time frame and aim at **building** up capable and sustainable **institutions** which would, in the longer run, deliver training (A) in a continuous, expanding and responsive way.

C. Another type of project might pursue a strategy where a systemic effect would be triggered by means of piloting an innovative training project (A) and foster its **replication**.



Type A projects may contain elements of type B and type C, depending on intended growth, sustainability and system-wide impact. Consequently, when designing a project or programme objectives and indicators from all three types may be combined; see example on the left.

4

The following overview provides pointers to objectives and indicators typical for each of the project types. For each project type and strategy level a table is provided which will offer:

1 A selection of typical sample OBJECTIVES

2 An array of sample INDICATORS for each objective (dimensions only; not elaborated)

3 Some remarks to the usage of suggested indicators and their measurement

4 One fully elaborated INDICATOR (as example).

Overview of available tables (point and click):

Project Type / strategy level	Focus: TRAINING DELIVERY			Focus INSTITUTION BUILDING	Focus REPLICATION
	micro level	meso level	macro level		
high level **GOAL**	1.1	2.1	3.1	4.1	5.1
OUTCOMES	1.2	2.2	3.2	4.2	5.2
OUTPUTS (deliverables)	1.3	2.3	3.3	4.3	5.3
OUTPUTS (internal results)	1.4	2.4	3.4	4.4	5.4

The collection of objectives and indicators contained in these tables should be seen as a snapshot of what the authors could find in their own areas of work and by checking out the neighbours' gardens and some of the literature. Such a collection is inherently incomplete and can never be free of errors. It is for project strategists, designers, implementers and M&E personnel to find their own suitable set of objectives and indicators. The following tables should be regarded as “food for thought”. Probably, there are lots of additional indicators out there which deserve being included in this collection. In contrast some that are included may not be good enough to survive. In order to discuss the quality and coverage of the indicators with a broader audience and to get hold of undiscovered good ideas, it might be possible to create an appropriate forum somewhere in the Internet.

Indicator Tables

1.1	GOALS OF TRAINING PROJECTS (micro level)				
#	OBJECTIVE	SUGGESTED INDICATORS		comments	sample
1	target group (former trainees) and their families are better off; target group has come-out of poverty level	□ escape from poverty level (using official thresholds) □ income differential □ standard of living □ array of household durables □ store of foodstuff □ savings □ location of house □ type, quality of housing □ number of school-going children □ availability of working capital □ education of children (level/expenses)		typical empirical method: tracer studies; problem: high cost and low data reliability; try alternatives: invite old boys/old girls through media, offer prizes, investigate visitors at center; usual rule: you need a comparison group in order to establish attribution; choice between "before-after" and "with-without" comparisons	"After 1 year of graduation average income is >25% above that of control group."
2	companies employing ex-trainees realize higher productivity of labour	□ company profits up □ company market share up □ company product quality up □ customer complaints down □ down-time of production lines lower □ equipment availability up □ company investments up □ demand for more trained persons up □ number of subsidiaries up		typical empirical method would be a comparative analysis of marginal productivity of labour; problem: nearly impossible to do; try instead: comparative case studies	"Number of rejected work pieces down by 25% one year after training of work force."
3	community life enhanced where former trainees live	□ less out-migration □ natural age pyramid (no loss of youth) □ better communal infrastructure □ shack / proper housing ratio lowered □ more involvement in local community decisions □ unemployment level down □ level of crime down □ youth activities up □ community voice: training for our kids		try: photographic comparative assessment (before : after or time series)	"One new communal infrastructure project per year realised."
4	micro-enterprise (informal) sector as a whole strengthened	□ informal sector associations formed □ associations form apex/umbrella bodies		There is an argument, whether this is a desirable objective, or whether the "informal" sector should turn „formal" in the long run.	"Provincial umbrella organisation of informal sector associations formed 5 years after project start."

1.2	OUTCOMES OF TRAINING PROJECTS (micro-level)					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	wage-employment improved	□ □ □ □ □ □ □ □ □	ex-trainees entering in jobs ex-trainees doing relevant work employment conditions improved duration of employment up companies prefer ex-trainees to others companies become long-term clients companies request on-campus interviews kids of staff apply for training participants ready to pay (share of) fees		Try innovative tracer studies (invite ex- trainees using mass media rather than tracing them with "detectives"); it should be combined with promotional activities in order to raise cost-benefit.	"6 months after graduation 50% the formerly jobless participants are placed into jobs."
2	more self-employment new micro businesses more owner-operators	□ □ □ □ □ □	ex-trainees set up own businesses ex-trainees' businesses survive ex-trainees take in family members ex-trainees return for more services family kids apply for training greater diversity of business services		advisable: build a long standing constituency for the project, use every tracing effort for marketing more services of the project! Mind, that an increase in self- employment may just be forced by too few vacancies in the formal sector; self- employment is not always necessarily the desired outcome...	"25% of all supported enterprises buy project services at least once per year."
3	small enterprises up and running (definition: small enterprises are potential employers)	□ □ □ □ □ □ □ □	partnerships of ex-trainees start-up ex-trainees found enterprises small enterprises survive small enterprises provide employment entrepreneurs return for more support small businesses obtain start-up loans small businesses expand pioneers make others follow (crowding in)			"50% of newly created enterprises start paying tax after 1 year."
4	corporate production problems solved (attributed to company staff returning from further training)	□ □ □ □ □ □ □ □ □ □ □	product quality up production process improved production cost reduced workforce more flexible (= can perform variety of jobs) returning staff promoted returning staff better paid demand for more staff upgrading companies ready to pay course fees companies pay cost covering fees kids of company clients apply for training staff development schemes appear fewer trouble shooting from external service technicians necessary		conduct customer satisfaction surveys; as a rule these should ALWAYS be coupled up with more marketing efforts and follow-up services from the side of the project; avoid purely research-driven visits at companies	"% of products rejected by quality assurance dropped by 50%."

1.3	OUTPUT / DELIVERABLES OF TRAINING PROJECTS (micro-level)				
#	OBJECTIVE	SAMPLE INDICATOR		comments	sample
1	school leavers turned out ready for initial employment	□ □ □ □ □ □ □	passed exam trade-tests taken passed through external testing (RPL) parents sent more kids employers give affirmative feed-back participants pay course fees happily participants recommend course to peers	Problem: Project's own exams will measure own success. This may be misleading or lead to "cheating"; preferable are independent tests; as a rule: avoid measuring the inputs, such as training hours conducted etc. When trade tests are used, it is essential that the underling occupational standards are relevant (i.e. in line with the economic demand and opportunities). Feedback from employers or propensity to pay course fees may come as handy proxy indicators.	"Revenue recovers variable cost at annually incline up to 100%."
2	employed workforce equipped with new, updated, expanded competencies	□ □ □ □ □ □ □	examinations passed trade tests taken satisfaction with course positive record of formative assessment lay-offs averted in negotiations with employers participants bear share of course fees participants invest free time		"50% of candidates pass trade test in 1st attempt; 25 in 2nd attempt."
3	proficiency of lowly skilled or semi-skilled personnel increased	□ □ □	trade tests taken promotion with seconding employers negotiated employers paying the course fees		"Increasing share of participants sponsored by employers: 25%-50%-
4	unemployed equipped with market-going job-entry competencies	□ □	community-based work projects negotiated to absorb trainees trade test passed		"75% of all participants placed in community work pro- grams at any time."
5	unemployed skilled persons placed in job-entry programmes	□ □	placement accomplished demand for more such schemes		"At least one new agency request trainees for placement: annually"
6	ability to pass trade tests increased	□ □ □	tests taken successfully admission to tests increased length of waiting list shortened	This may work well, when trade testing is in the hands of an independent organization or network.	"Decline of fail rates from presently 50% to 15% within 5 years."
7	emerging entrepreneurs ready for starting own business	□ □ □ □ □ □ □	business registration done business plans ready viable product/service idea or concept positive feed-back from earlier starters starters put up billboards in favour of project starters return for more services franchising takes off (project as franchiser)	use of proxy indicators advisable; these arte to reveal "returns on investment"	"Value of equipment assets of small businesses incline annually by 15%."
8	competitiveness of small entrepreneurs increased	□ □ □ □	bottleneck in skills removed procurement situation improved marketing facilities improved network of "each one help one" initiated	Informal sector associations may be used to establish this kind of rapport and data gathering. Personal visits/spot-checks are inevitable.	"Random checks on product quality at Institute of Standards show annual incline."

1.4	INTERNAL RESULTS OF TRAINING PROJECTS (micro-level)					
#	OBJECTIVE		SUGGESTED INDICATORS		comments	sample
1	training courses set-up and carried out; participants put through the courses	□ □ □ □ □ □ □ □ □	number of person*weeks of training size of groups fees taken ratio of applications : admissions ratio of admitted : turned out ratio of exams sat : passed number and type of courses avg. duration of courses official course approvals (accreditation)		As an overall indicator (not specifying individual courses) capacities to be installed versus actual utilization may be used. This is useful, if the courses are to respond to market forces quickly.	"All technical training venues used at 50%-60%- 70% during initial years."
2	courses designed, course outlines prepared, curricula developed, syllabi prepared, test items available, lesson plans prepared, instructional material at hand, rotation plans available	□ □ □ □ □ □ □ □ □ □	number of designs quality of designs (structure, degree of detail, layout) relevance to labour-market) type of underlying occupational profile (e.g. tri-partite involvement) number and type of test items storage/access of test items (database) use of lesson plans (binding or not) type and availability of media use and ownership of media/hand-outs ratio theory : practice learning materials properties (stimulating problem solving, enabling self-learning)		This is the whole range of "software and teachware". Quality assessment usually requires check-lists or detailed quality criteria and an independent evaluation. This could be installed in the form of regular or occasional peer assessment.	"Complete set of course material developed, tested and annually reviewed for all 5 technical trades."
3	building ready for use, equipment installed and operational, all training venues ready for delivery, maintenance of venues organised, external venues (on-the-job) acquired and linked, accreditation obtained for the center as a whole	□ □ □ □ □ □ □ □ □ □ □	ratio of class : lab : workshop : in-plant seats / space installed m² per person available major equipment (with group sizes) availability of equipment for training use of maintenance plan/concept operational : unused days (annual avg.) ratio in-school : in-plant venues duration of "internships", industrial projects", industrial attachments relevance and content of internships in-plant training quality control system		The indicators may focus on "readiness for use" or actual "utilization"; first assessment after commissioning may use a check-list-based inspection. The checking of in- plant training facilities requires spot-checks; usually done by "official" training advisers or roving instructors.	"All venues ready for training according to annual inspection. Less than 10% items of check-list defective."
4	teachers & instructors hired an inducted, performance improved, teachforce ready to deliver quality training; center-specific teaching methods and style applied	□ □ □ □ □	number of pedagogical staff (in full-time equivalents) ratio students : teacher performance levels (for various categories of staff) ratio of student-centered learning allowing students own speed of learning CBT / mastering approach instead of rote learning / drilling		Teaching style may be assessed through "hospitation", students' feedback, or peer-group feedback; one may want to experiment with "open house events", where modern learning styles are demonstrated publicly...	"All teacher vacancies filled by end of year 3." "Number of non- or low- performers reduced annually."
5	training linked or dovetailed with production, incubators made available (to hatch new businesses), joint businesses (project in cooperation with trainees) in place	□ □ □ □ □ □ □ □ □	volume of production revenue from production training places vs. worker places at prod. type of linkage / intensity of integration organisation of production ratio of practical training : on-real-job number of "incubators" or size of incubator space number of joint start-up ventures average duration of joint ventures size of joint ventures		There are various models of how to combine Production and Training (training AND production; training CUM production; teaching FACTORY); Conflicts of objectives are notorious: mind the 3-pronged purpose: RELEVANCE, LINKAGES and F'UNDING.	"60% of all trainees take part in production activities during 2nd half of course." "Production recovers 15%of all training costs."

2.1	GOALS OF TRAINING QUALITY TOOLS PROJECTS (meso level)					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	educational quality of training institutions enhanced	□ □ □	employers satisfaction placement results of graduates start-up careers of graduates		for verification and attribution of impacts: "before-after" or "with-without" comparison; a scientific design requires a control/comparison	"Institutions covered by the program compare favourably according to employers' opinion."
2	students learn more effectively	□ □ □ □ □ □	students response, satisfaction index exam results attrition (drop out ratio) duration, repetition, re-sitting of exams time spent on studies versus available leisure time time saved through distance learning		control group advantageous; experimental set-up may be considered during trial runs or test market phase	"Majority of students state and attribute improvements between 1st and last semester."
3	practical relevance of training increased	□ □ □ □ □	internships made a mandatory element of training time ratio in-school vs. in-plant training in-plant training concept and quality assurance in place in-plant coaches = standard feature system-wide company training plans standard practice system-wide			"50% of all colleges have integrated industrial practicals after 3 years."

2.2	OUTCOMES OF TRAINING QUALITY TOOLS PROJECTS (meso level)					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	teachers teach better	□	satisfaction with teaching skills upgrading		teacher performance and style may be checked through feed-back instruments: - students' feed back - peers' feedback or traditional class room observation ("hospitation")	"Visiting engineers from industry rate quality of instruction higher every year."
		□	classroom / workshop teaching style has become more student centered			
		□	more emphasis on problem solving skills			
2	instructors perform better	□	preparation efforts increased			
		□	hand-outs and other material improved			
		□	positive students feedback on teachers			
		□	promotions of high performing teachers			
		□	number of "poached" instructors/teachers			
3	students learn better (even if and when training infrastructure is an obstacle)	□	academic performance		problem of attributing learning results to just ONE input factor;	"Employers rate present student cohort better than previous."
		□	testing results			
		□	positive teachers feedback on students			
4	students step up self-learning efforts	□	ratio of time spent in class : at books		needs students interviews; consider group interviews with fixed/standardised part and an open discussion at end Experiment with: students write letters to interviewer or evaluator (such messages can reveal a lot).	"Students work-books show signs of intense use."
		□	satisfaction with learning material			
		□	wear and tear of self-learning materials			
5	students enjoy studies with new learning material more than before	□	satisfaction index			"Steadily high number of feed-back- forms with positive comments."
		□	demand for more self-learning material			
		□	suggestions for improvement of materials			
		□	propensity to pay for learning material			
		□	volume of pirated copies			
6	institutions improve training quality	□	better hardware (availability, condition, maintenance, utilization, accessories)		This is a typical summative objective. Attribution will be a major problem in the verification process. If companies are ready to pay for training, then this is a good proxy indicator "VALUE FOR MONEY"	"Institutions covered by the program have significantly higher number of campus interviews."
		□	more relevant occupational standards			
		□	acceptance of occupational standards and certificates by companies			
		□	more relevant courseware			
		□	better performing teachforce			
		□	better training management			
		□	market accepts higher course fees			
7	out-of-school labour-force improve their competencies	□	purchase and use of training materials by non-students		consider feedback forms included in the books; create incentive for sending it back	At least 20% of learning material is purchased by non- students."
		□	number of practitioners applying for trade testing and certification			

2.3	OUTPUT / DELIVERABLES OF TRAINING QUALITY TOOLS PROJECTS (meso level)					
#	OBJECTIVE	SAMPLE INDICATOR			comments	sample
1	trained instructors / teachers provided (initial training)	□ □ □ □ □ □ □ □ □	courses run for fresh teachers participants turned out person*weeks conducted revenue from course fees net profit realised from sold courses upliftment of teachers/instructors satisfaction of participants satisfaction of seconding institutions more or steady demand from seconding institutions		Most of the "hard" facts will flow from well organised school monitoring data systems. It may be a good idea to combine satisfaction surveys with promotional activities among the target teachers.	"Ratio of trained versus untrained teachers up by 10% annually."
2	teaching skills upgraded, updated					"5% of all teachers participate in further training per year."
3	specialization of teachers (in technology or special functions at the school)					"Majority of schools request new topics every year."
4	teaching aids, instructional materials distributed	□ □ □ □ □ □ □ □	volume of sales market penetration net profit realised materials reaching the end-user (%) quality of materials meeting criteria list satisfaction of users / customers increasing demand from customers customers' recommendations to peers		marketing tools should be in place and can double as monitoring instruments	"Teachers spent 1% of salary."
5	learning materials distributed					"20/30/40/ 50% of all students own some materials during inception phase."
6	self-learning materials distributed					
7	occupational standards accepted	□ □ □ □ □	endorsement by responsible body relevance in the labour market standards used in collective bargaining standards used in official pay scales use of occupational standards in design of corporate job descriptions			"1 Industry per year adopts standards in collective bargaining"
8	tests and certification system operational	□ □ □	number of candidates appearing for tests revenues from testing fees backlog of applications for testing			"Testing centers run 2 shifts after 4 years."

2.4	INTERNAL RESULTS OF TRAINING QUALITY TOOLS PROJECTS (meso level)					
#	OBJECTIVE	SAMPLE INDICATOR			comments	sample
1	teacher and instructor training courses organised (initial training, upgrading and updating)		course designs available in: □ didactical skills □ preparing of lesson plans □ modern teaching and learning methods □ maintenance of training venues preparation □ and use of hand-outs organising industrial □ projects □ organising industrial attachments □ linking training and production pro- □ motion of self-employment		These indicators are basically quality-driven; focus is not on delivery! Overall quality will result from: proper format, good presentation, content relevance, didactical considerations, methodology, look and feel... For checking the quality of staff development course designs an internal quality management concept could be set up (e.g. following ISO 9004) or the materials may be sent out for a specialist's or peer group assessment in appropriate intervals.	"State-of-the-art course modules cover the complete range of methodology & didactics."
2	training courses for non-pedagogical staff organised	□	course designs available in: maintenance of training venues lab and experiment preparations □ backstopping for industrial internships □ tracer studies □ trainee placement services			"Courses available for at least 50% of non- pedagogical staff of training centers."
3	specialization of teachers and instructors		course designs available in: □ skills of curriculum development □ skills of teaching aids development □ skills of standards development □ skills of test item development □ skills of database creation and use			"Courses offered in at least 4 different areas of development."
4	training management courses organised		course design available in: course □ marketing and design models for in- □ dustrial attachment □ business plan development □ public relations □ project monitoring □ project planning			"Training Modules offered according to attached diagram"
5	learning and instructional materials developed		content, coverage, number, type, properties, size, price for: instructional media □ teaching and learning packages □ self-learning materials □ multi-media volumes □ web-site facility and services			"Curriculum of one trade per year fully covered by material."
6	occupational standards system developed	□	standards and test items provided □ testing functions taken up by franchisees			"Per year 5 testing centers receive accreditation."
7						

3.1	GOALS OF SYSTEM DEVELOPMENT PROJECTS (macro level)					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	system further developed (output, intake, process, funding, decision making)	□ □ □ □ □ □ □ □ □ □ □	system delivers better output quality system turn-out better in line with manpower demand intake of system better in line with requirements/aspirations of school leavers system and labour market better linked and matched system access opened up to additional target groups (inclusion) participatory decision making at system level (tri-partite or multi-partite bodies) system funding re-organised, ascertained system decision making decentralized provider accreditation system installed course approval system installed occupational standards introduced, endorsed share of NGOs / commercial providers increased		The metaphor of system development follows a sequence of "better information" - "better decisions" - "better systems";	"Training centers switched towards market driven course supply." "Training system decentralised and commer- cialised by 2010."
2	sub-systems further developed	□ □ □ □ □ □ □ □	training and production become standard features of technical training institutions occupational standards and testing opened up to all members of labour-force school-based and plant-based training firmly integrated curriculum development entrusted to multi-partite bodies training system expanded towards servicing the informal sector training system opened up to cater to disadvantaged groups of society training and employment generation features linked in training institutions short course institutions launched to service demand of employed adults cooperative training (school/company) strengthened			"All training centers offer 25% of courses to applicants with lower academic qualifications." "Cooperative training becomes standard solution with 50% training time in- plant."
3	system aware and responsive to inclusion / equity aspects; e.g. gender (can be specified in terms of focus: gender, caste, religion, poverty, habitat, conflict affected groups)	□ □ □ □ □ □	capacities used by male/female students representation of "male" vs. "female" occupations or courses (cultural acceptance) fair composition of teachforce fair composition of management cadres gender sensitive presentation of learning and teaching materials new courses in favour of female needs/requests		These are widely accepted cross- sectional aspects which supplement other system development strategies.	"Male domination of system-throughput reduced every year by 10%."
4	system responsive to ecological aspects	□ □ □ □	introduction of ecology-related occupations curricula show ecology-aware content further training of teachers in ecology matters ecology-aware practices at schools (maintenance, use of resources, handling of waste and hazardous materials)			"Ecology aspects considered in all training materials (for teachers and students) by year 2000."

3.2	OUTCOMES OF SYSTEM DEVELOPMENT PROJECTS (macro level)					
#	OBJECTIVE	SAMPLE INDICATOR			comments	sample
1	responsible bodies take rational decisions	□ □ □ □ □ □ □	visions for new/overhauled system mission improved system strategies elaborated to change-over or to develop the system decisions based on comprehensive information tapping available experience, feedback from trials, international comparison, etc. reduced uncertainty and incompleteness of available information decision making done in transparent, documented way solutions blending international experience with national particulars		This may be a sensitive issue: National legislation influenced by a bilateral project. A low-profile is necessary.	"Manpower Development Plan emerges by end of 2nd year." "Public hearings on intended Technical Education Legislation "
2	decision making bodies re-organised, power shared, widened, delegated, re-allocated	□ □ □ □ □ □	tri-lateral power sharing among state, employers and employees devolution of powers and responsibility to lower level bodies opening up of "pockets" for innovative, free-wheeling sub-systems and providers de-regulating of sub-systems (e.g. basing occupational standards on voluntariness) accreditation of providers based upon outcomes rather than input/process control segmenting of levy-grant systems (probably sectorial; regional=doubtful)		Multi-partite decision making tends to become a standard. This could involve co-determining system as a whole, or for sub-aspects such as endorsing occupational standards, taking responsibility for cooperative training and for managing a levy-grant system.	"A Tri- partite body is formed by law by year 2000." "Regional funds are formed for the training levy."
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3.3	OUTPUT / DELIVERABLES OF SYSTEM DEVELOPMENT PROJECTS (macro level)					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	awareness created on best practices	□ □	best practices from several countries presented to key decision makers and discussed national symposium conducted bi- annually with participants from a cross- section of relevant institutions			"Quarterly topic-based events with participation specialists from 75% of stakeholders conducted."
2	evidence about feasibility of models provided	□ □ □	trial run results presented & discussed conclusions drawn by decision makers other agencies willing to adopt the model			"Written Comments of key decision makers on viability of model obtained."
3	answers to policy or system management questions provided	□ □	quarterly hearings conducted, where answers to policy questions are presented and discussed ad-hoc answers to urgent questions provided monthly		These objectives are mostly about information and communication. There could be efforts to diversify the means and styles of communication in order to reach / and make interested other than the usual target groups (key decision makers). The new media could be made use of in order to reach a broader audience and facilitate active dialogues (WebSite and News groups). Interactive means of communication (e.g. Internet) can be used for lively and instant monitoring.	"10+ ad-hoc queries per year answered within less than 1 week."
4	recommendations issued for system developers	□	briefings / bulletin with recommendations by system practitioners			"Newsletter published quarterly."
5	blue-prints for system modifications prepared	□ □ □	master plan created and proposed proposals for implementation of innovative features presented/distributed break-down of overall plan into stakeholder-specific sub-plans			"Master plan officially received by decision makers."
6	advertisement campaigns for new system features	□ □ □	features for a system overhaul presented to and through the media positively received by the media response by the media audience (e.g. letters to editors)			"Newspaper & magazine clippings show continuing attention of the issue."
7	showpieces opened up to public, professionals and policy makers	□ □	model center run and kept at display to public, professionals and stakeholders; regular "open days" and special events conducted			"Guest book of open days shows more than 500 entries, 50 of which include diagnostic comments."
8	implementation tools and strategy options offered	□	plans, software, marketing material etc. prepared for implementers			"Implementation strategy available in Logframe format."

3.4	INTERNAL RESULTS OF SYSTEM DEVELOPMENT PROJECTS (macro level)				
#	OBJECTIVE	SUGGESTED INDICATORS		comments	sample
1	documentation center, information pool, query system, help desk set up and services provided	□ center with x volumes kept available to users; capacity of y seats; open all day □ mail/fax/email answering service, capacity = xyz queries per day; □ INTERNET café run and realizing turnover of …		These service provisions may be planned as logframe- results or alternatively planned on the activity level.	"Doc center with initial set of 500 documents is open 20 hrs/ week; avg. new arrivals per month = 10."
2	meeting point, common address provided	□ meeting, conference and group working facilities provided to stakeholders			"20 annual conferences with 12-20 persons conducted with full Metaplan equipment"
3	conference facilities and services provided				
4	facilitation and moderation services provided	□ full time moderator and pool of external moderators kept available for stakeholder meetings, workshops, seminars; □ moderation materials/ media available for 12 groups of up to 12 participants			"20 facilitated 3 day workshops arranged per year."
5	exhibition facilities and services provided	□ space and equipment kept/made available for 1 permanent exhibition showing … □ new releases kept available			"4 major exhibitions/fairs per year conducted, reaching not less than 2000 visitors."
6	pool of experts made available	□ experts from relevant subjects on call for various professional assignments □ number of pre-arranged professional partnerships □ contracts concluded with long-term backstopping institutions □ stationing of long-term advisors (expats)			"12-20 person-months of services provided per year showing an increasing trend."
7	publication and editing services provided	□ editing, graphic design, multi-media support for system-relevant literature and reports kept available			"5 publication projects finalised every year."
8	trial runs conducted and evaluated	□ trial runs designed, trials assigned to participating pioneer providers □ trials supported, researched and documented			"3 trial runs per year initiated; full documentation available after 3 years."

4.1	GOALS OF INSTITUTION BUILDING					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	institution secured a long-term survival under changing economic conditions	□ □ □ □ □ □	growth of capacities and investment new services initiated old services discarded mission statement updated participatory decision making structure subsidiaries founded		On the highest level the objective is not simple survival but keeping up the dynamism and ability to respond to change.	"Investment in new technology at least every 3 years."
2	institution closed down and re-opened with new mission	□ □ □	carefully organised closure business plan for successor institution well organised opening of new institution		This is regarded a sign of being able to respond to an extreme challenge.	"Orderly winding up process while securing the assets to a related project.
3	institution well placed in the training market	□ □ □ □ □ □ □ □ □	institution rated among top 10 revenues show steady incline increasing number of applicants competitors imitate range of services innovations successful at rate of x % new market segments conquered new products/services launched marketing department plays crucial role for product design and customer relations quality assurance procedures introduced; certifications obtained		Not just survival among the pack but staying at the top could be the message.	"Institution accredited as an ISO9.... service provider by the year 2020."
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4.2	OUTCOMES OF INSTITUTION BUILDING					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	institution financially secure and stable	□ □ □ □ □	re-investment carried out modernization investment done high reputation in the market success in attracting sponsor money financial reserves reaching ...% of turnover		Attracting sponsor money requires good financial management and public relations skills.	"Training equipment replaced according to re- investment plan."
2	institution well supported by staff and managers	□ □ □	staff fluctuation at controlled level corporate identity high and clear staff aware of and behind mission			"100% of professional staff well aware of mission."
3	institution well embedded in social and industrial environment	□ □ □ □ □	increasing good-will with neighbourhood essentials of mission known to public "extra-curricular" activities and events to liaise with socio-economic neighbourhood industrial neighbours pay visits, conduct "campus interview" for new recruits co-determination bodies (with employers, employees, clients, local communities) institutionalised & alive			"Annually increasing number of graduates is placed by means of campus interviews."
4	high institutional reputation	□ □ □ □ □	products/services in high demand customers pay cost-covering fees institution receives special assignments (trials, events, high ranking visitors, development tasks) from parent agency lead role towards peer institutions institution carries out applied research and development (e.g. curricula) for peers			"Ratio of applications :admissions significantly higher than at peer institutions."
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4.3	OUTPUT / DELIVERABLES OF INSTITUTION BUILDING					
#	OBJECTIVE	SAMPLE INDICATOR			comments	sample
1	structure of institution complete	□ □ □ □	organogram developed & positions filled service/policy manual in place and in use task forces and teams in charge of special temporary assignments organogram positions and links "alive"		organisation structure should show staffing, apex and attached bodies and advisors	"Positions filled in accordance with growing turnover."
2	performance of institution up to mark	□ □ □	services well received by target group quality groups and checks lead to improvement obsolete services regularly weeded out			"Ex-graduates increasingly endorse training to next- generation applicants "
3	economic survival ensured	□ □ □ □ □	costs recovered through revenue and/or through secure budget allocations capital accumulation for re-investment in place no depletion of assets (caused by over-use) technology upgrading secured			"Accumulation of capital in line with depreciation."
4	all management and delivery systems work well	□ □ □ □	inventory of managerial systems, instruments and tools done in regular intervals systems updated and streamlined monitoring system alive and leading to corrective managerial decisions management systems well documented and integrated (cf. ISO 9000 or special training quality certification systems of national or international certifiers)			"Majority of monitoring recommendations are taken up & actions are taken at top management level."
5	institution fit for survival	□ □ □ □	all management systems in place all management systems applied mission clear / on track staff acknowledged and motivated			"Independent organisational review attest workability of all management systems."
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4.4	INTERNAL RESULTS OF INSTITUTION BUILDING				
#	OBJECTIVE	SAMPLE INDICATOR		comments	sample
1	institution founded	□ decision on legal form/entity registration done □ memorandum of association done □ bylaws done □ founding members' signature on record □ start-up capital injected □ 1st general meeting convened □ association with "parent" institutions created			"Constitution enforced by end of year." "Major stakeholders become members by end of year."
2	organization developed	□ organogram generated (positions & links defined) □ positions described (job profiles) □ reporting lines / matrix-links defined □ positions filled over time □ successors/under-studies identified □ service/policy manual created & updated □ decision making patterns & panels created □ meeting & information policies developed □ model for information processing and sharing among staff developed □ office routines defined			"Job descriptions available for all positions of organogram by end of year." "At 75% of all meetings visualisation techniques are used."
3	staff development ensured	*implementation of the following systems (= jointly developed, documented, tested, introduced, applied & followed up):* □ task analysis and job descriptions □ recruitment and selection of staff □ job induction and competence "gap" assessment □ how to negotiate performance targets □ empowerment, reporting and monitoring □ feed-back and coaching culture □ further training for staff (internal seminars) □ further training for staff (coaching on-the-job) □ further training for staff (external courses) □ job rotation and external attachments □ appraisals and rewards/incentives □ career planning / promotions □ successor planning / understudies □ consultants (their changing roles from "foreman" to "coach" to "backstopper") □ implementation of staff development plan			"Annual updates or the staff development plan done by end of April." "20% of all staff undergo further training every year." "Appraisals carried out annually with all staff." "10% of all staff receive bonus payments."
4	generic management instruments and policies put into place, used and maintained	*implementation of the following systems (i.e. jointly developed, documented, tested, introduced, applied & followed up):* □ strategic planning, formulating of the mission □ operations planning and re-planning □ monitoring and evaluation □ reporting and report-triggered decisions □ retrieval system of major documents □ donor handling procedures □ staff leadership style/principles ingrained			"Operations plan tracked quarterly and updated annually." "Operations plan broken down into staff guidance plans by middle managers."
5	financial management system established and operated	□ financial accounting system □ cost accounting system □ balance sheet done annually □ income statement done quarterly □ cash flow analysis/prognosis monthly □ business planning every 5 years □ re-investment/net investment plan □ income generation / soliciting of sponsor money			"Financial information available at the specified deadlines." "Targets of business plan achieved with ±20% accuracy."

4.4	INTERNAL RESULTS OF INSTITUTION BUILDING (continued)					
#	OBJECTIVE	SAMPLE INDICATOR			comments	sample
6	marketing, product design, and quality management in place	□ □ □ □	market-linked system (e.g. following ISO9002) product design using appropriate technology or labour-based technology accreditation/approval for training services franchise contracts awarded for testing/certification		There is a considerable array of tools for service-marketing available.	Market segments known by end of year. Penetration strategy drawn up one year later."
7	training and production management system in place	□ □	industrial organisation & design of workplaces / training places reconciliation tool "training : production" *)		Conflicts are likely. Consider a 4- field box of rights & duties.	"Conflicts are resolved amicably within four weeks."
8	management of educational resources and tools management in place	□ □ □ □ □ □	maintenance & upkeep systems training materials supply, storage and issuing curriculum development, lessons planning equipment, tools and other hardware instructional media, teachware, learning materials development and supply arrangement, layout, use of training venues linking, integrating of training venues			"Tripartite curriculum development & updating teams in place." "Maintenance history files established and tracked monthly."
9	gender action plans worked out and implemented	□ □ □ □ □ □	plan jointly developed and endorsed annual targets set for gender equity at all levels: staffing, participants and alliances creation of gender-conducive facilities gender-aware PR gender-awareness of monitoring/reporting			"Gender action plan enforced and tracked annually; checked at annual staff and students meeting."
10	networking and liaison functions in place	□ □ □ □ □ □ □ □	getting hold of best practices linking up with sister institutions and actively maintaining the links linking up with "neighbouring" sectors such as private sector and financial services development, urban development etc. engaging in donor co-ordination "hard-wired" networks division of labour with sister institutions engaging in synergy projects and joint revenue creation PR & media links established/maintained			"Network of active partners increased every year." "Net revenue from joint projects with peer institutions not less than 2000$."
11	Donor's role	□ □ □	Role clarification: advising or managing ? Advising the Management (rights & duties) Bricklaying in Institution Building			

5.1	GOALS OF A REPLICATION STRATEGY				
#	OBJECTIVE	SUGGESTED INDICATORS		comments	sample
1	Model replicated by project at another location (subsidiary)	□	branch office opened up following same strategy and approach	The strategy suggested here assumes a multitude of potential replicators. Apart from "the client", i.e. the agency which mandated the model and "owns" the outcome of the trials, there may be other potential replicators. By gearing the project services also to those, the replication scale can be expanded.	"Subsidiary training center opened up in Mapuataland during 4th year."
2	Model adopted and implemented by other agencies	□ □ □	model cloned in several cases over time major features of model used at other locations franchise contracts negotiated		"NGOs set up training centers adopting the model approach at a rate of one per year."
3	Model adopted and implemented system-wide by responsible authority (regulator)	□ □ □	national training board embarks on full scale implementation strategy existing institutions switched to model approach new model institutions set up		"Model approach becomes standard solution in all existing training centers at a rate of 10% / year."
4	Features of the model become standard for peer institutions	□ □ □ □	all features of the model introduced at other comparable institutions/programs all major features adopted at ... some major features adopted (bandwagon) model in principle adopted, but adapted to prevailing local or regional conditions		"50% of existing training centers launch additional programmes following the basic principles of the model approach during the next project phase."
5	Model incorporated in donor's portfolio of assisted projects	□ □ □	model appears as a standard or preferred type of project in donor's portfolio donor includes model project in sector programmes as preferable solution donor advertises model in donor community		"Several agencies of the donor community request blueprints of model approach."
6	Model ported to another country (e.g. South-South)	□ □ □ □	model transferred from trial country to an interested neighbouring country model accepted at multi-national conference as a preferable solution trial project assists follower project(s) across national boundaries trial project staff carry out consultancy services at international level		"2 start-up consultancy missions per year carried out for other countries in the region at full cost recovery."
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5.2	OUTCOMES OF A REPLICATION STRATEGY					
#	OBJECTIVE	SAMPLE INDICATOR			comments	sample
1	responsible National Training Authority formally approves of the model	□ □ □	reform/innovation decision taken implementation schedule issued legislation/ordinance/passed		A classic replication strategy, where Government is seen as the main addressee of the process. Ideally model-runs are mandated by "the client". Tool = 44	"Model approach propagated in long-term manpower plan of the Government."
2	Funds for model replication made available	□ □	budget estimates for model submitted budget for first series of replications approved			"Implementation budget covering the next 4 years allocated."
3	stakeholders recommend model for replication	□ □ □	conference held, decisions made in favour press releases of major stakeholders favour model annual reports/bulletins/newsletters of stakeholder feature and favour model			"Model positively commented or recommended in all newsletters/ journals of the stakeholder organisations."
4	Model ranks high on agenda of decision makers	□ □ □ □ □	model appears as pivotal element in system-reform plans model recommended to legislators model requested and advocated in lobby public opinion pays attention to model media provide room for model debate, letters to editors; blogs, etc.			"Bill submitted to parliament by end of project."
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5.3	OUTPUT / DELIVERABLES OF A REPLICATION STRATEGY					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	model presented as replication-ready	□ □ □ □ □ □	documented tests, proof of success recommendations for replication moral suasion towards replication action plans for replication submitted model site visited by prospects and clients Hot-Line frequently used by interested parties and prospective clients		From objective 1 to 4 there is an increasing degree of persuasion involved. "Hard-Selling" of a model may lead to an artificially high acceptance rate & misjudgment of the real likeliness of replication.	"Full documentation available in several versions for different audiences: - scientific/ - political - journalistic."
2	model advertised for replication	□ □ □ □ □	media campaigns launched public forum provided professional forum provided manuals and other supportive materials for replication created and sold WebSite visited by interested parties			"120 copies of replication manual sold at cost during 1st year." "50 visits to WebSite per week with inclining trend over 6 months."
3	support for replication made available	□ □ □ □ □	project staff invited repeatedly for presentations / debates / clarifications supporting information and assistance requested by parent agencies master implementation plan elaborated consultancy/training services for clients interested in replication/adoption/ adaptions of model marketed or provided			"20% of time of all involved professional staff dedicated to external information."
4	potential replicators identified	□ □ □	requests for information received requests for start-up support received consultancy services sold to interested replicators			"Project approached by at least 10 seriously interested parties per year."
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5.4	INTERNAL RESULTS OF A REPLICATION STRATEGY					
#	OBJECTIVE	SUGGESTED INDICATORS			comments	sample
1	trial runs carried out and evaluated	□	test designs elaborated evaluation approach designed evaluation result provided trial history files available		Models are understood as trials and errors which precede a far- reaching (possibly expensive) decision. It should be accepted that the result of the model run could be either positive or negative. A negative conclusion ("unsuitable" for replication.") is perfectly alright as a project outcome. The process of erring and re-trying may be iterative. However, success of the model must not be "forced".	"Findings, conclusions & recommenda- tions from trial run available."
2	trial runs researched and documented	□ □ □	interim trial report published final trial report published additional publications (special issues)			"Continuous documentation available with time lag no longer than 3 months."
3	model improved and tested	 □ □	*ongoing trials:* diagnosis & conclusions presented modified/improved/adapted designs			"Documentation of reasons for and issues of modification of design."
4	evidence and recommendations prepared	□ □ □	position papers edited/published project closure report published lessons learnt disseminated			"Recommendations submitted in decision-friendly format by end of trial-runs."
5	marketing material and events created	□ □ □ □	PR material developed PR concept approved by board model site developed into a live visitors' center WebSite installed and maintained		A tool or a checklist for designing media campaigns would be very helpful.	"Flyers, brochures, videos, CDs, T-Shirts, and popularized versions of the report available for mass distribution by of project."
6	start-up facility for "replicators" provided	□ □ □ □	staff proficient as consultants blue prints for replication available FAQ papers available training modules for prospective "clients" designed			"Training modules designed and ready for early replicators or trail-blazers."
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