

External Review of the Ifakara Health Institute

SDC Support Phase 2008 - 2013

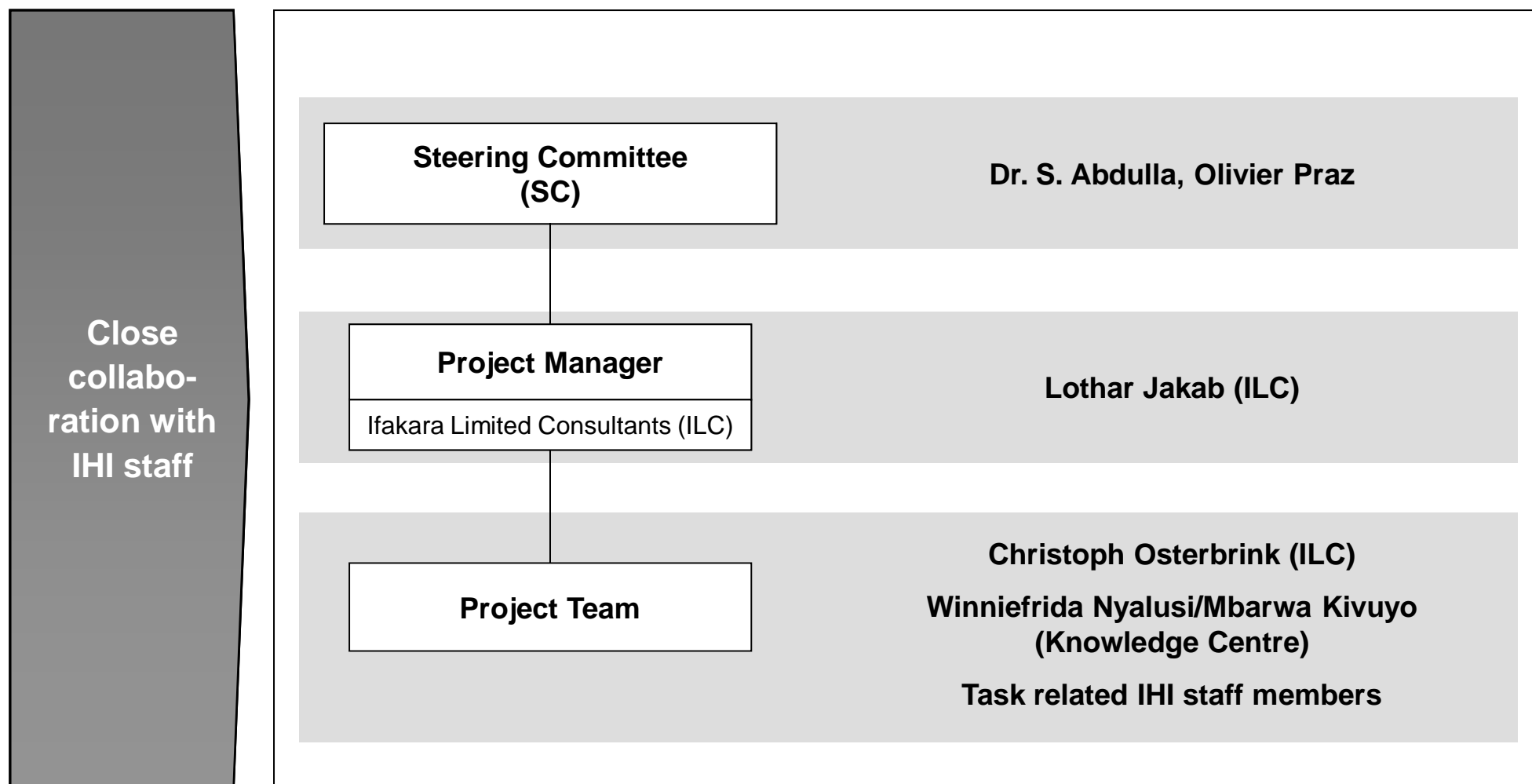
- Final Report -

Dar es Salaam/Frankfurt am Main, April 2013

1. Overview and Approach
2. Review 2008-2013
3. Prepare for 2013-2018

1. “Reviewing and capitalizing experience and results achieved under the current strategy (2008-2013)
2. Contributing to IHI’s own evaluation and preparation of the next strategic plan (2013-2018)
3. Bringing elements for SDC’s decision on the continuation and form of its future support to IHI” *

*Source: Terms of References



Starting Point: IHI - A Success Story... But Is the Story Sustainable?

- A history of more than 50 years means:
 - Enormous knowledge base
 - Important actor in the Tanzanian health sector
 - Internationally recognized and connected as a Tanzanian led health research institution (awards)
 - Growing fastly during last decade
- Current status:
 - Registered as independent Trust in Ifakara
 - Non-profit organization
 - 1,242 employees in seven locations as of the 30th of June 2012 (including project staff), thereof 232 scientists
 - In 2011, 55 articles published in international peer-reviewed scientific journals
 - Annual budget approx. USD 23m, thereof 80% research grants and 20% core funding from Switzerland, UK, Ireland and Norway
 - Current funding period = strategic plan 2008-2013 (financial year ending 30.06.)

- Vision:

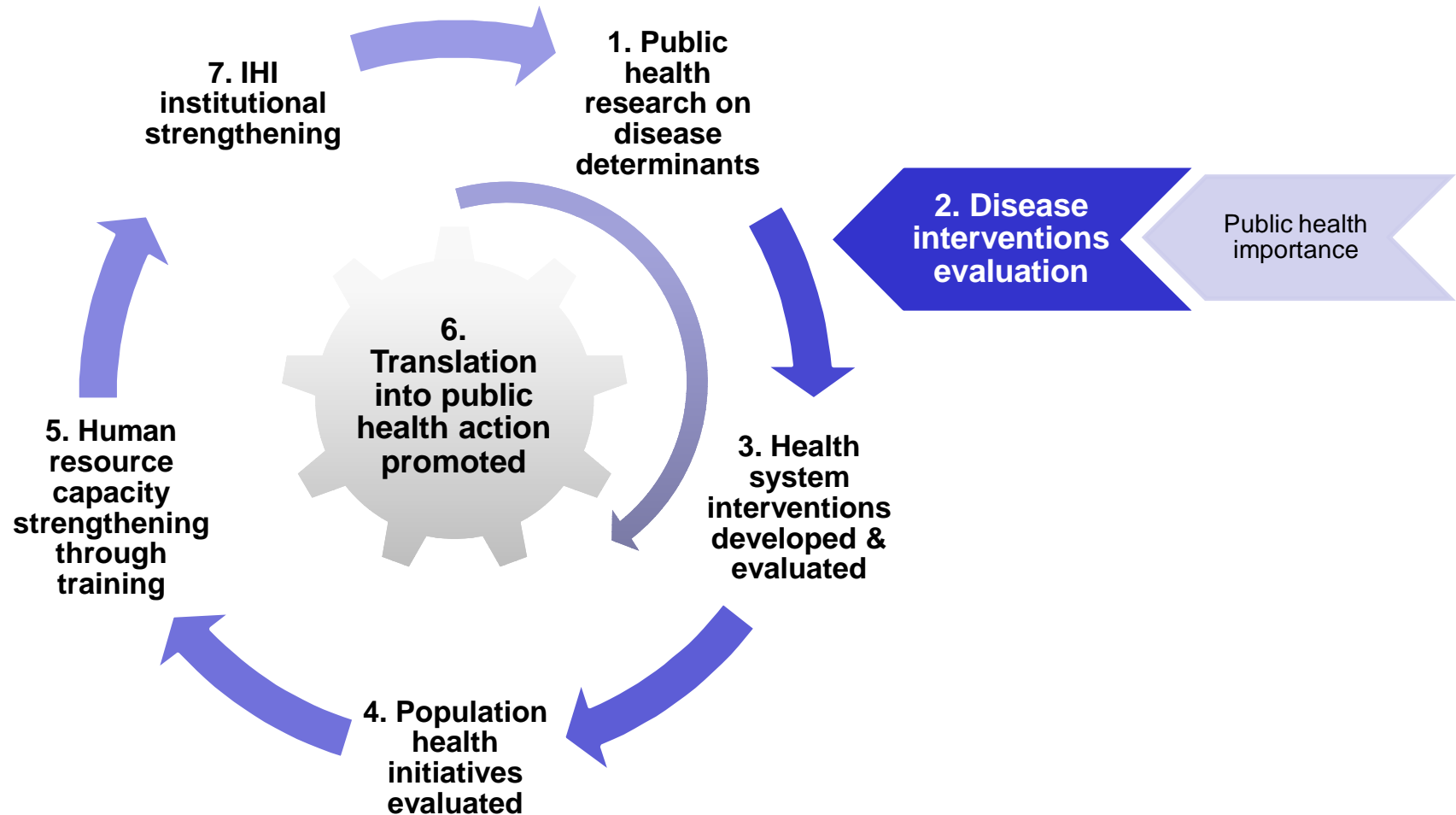
„To be a centre of excellence and innovation in health research and development, aiming at maximizing population health gain“

- Mission:

„To develop and sustain a district-based health research and resource institute capable of generating new knowledge and relevant information for public health policy and action“

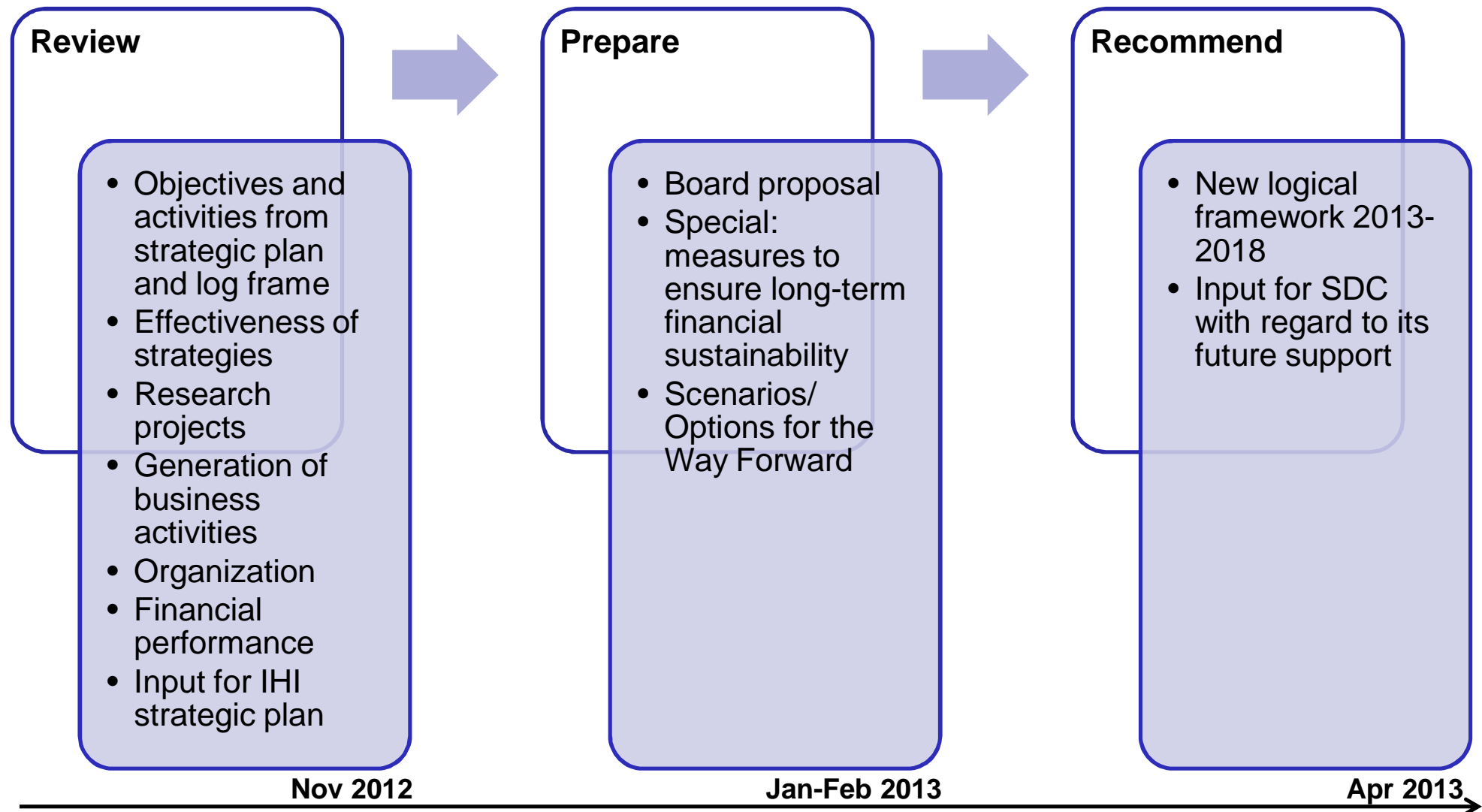
*Source: IHI Strategic Plan 2008-2013

IHI's Strategic 'Virtuous Cycle' As We Saw It - Based on the Strategic Plan 2008-2013



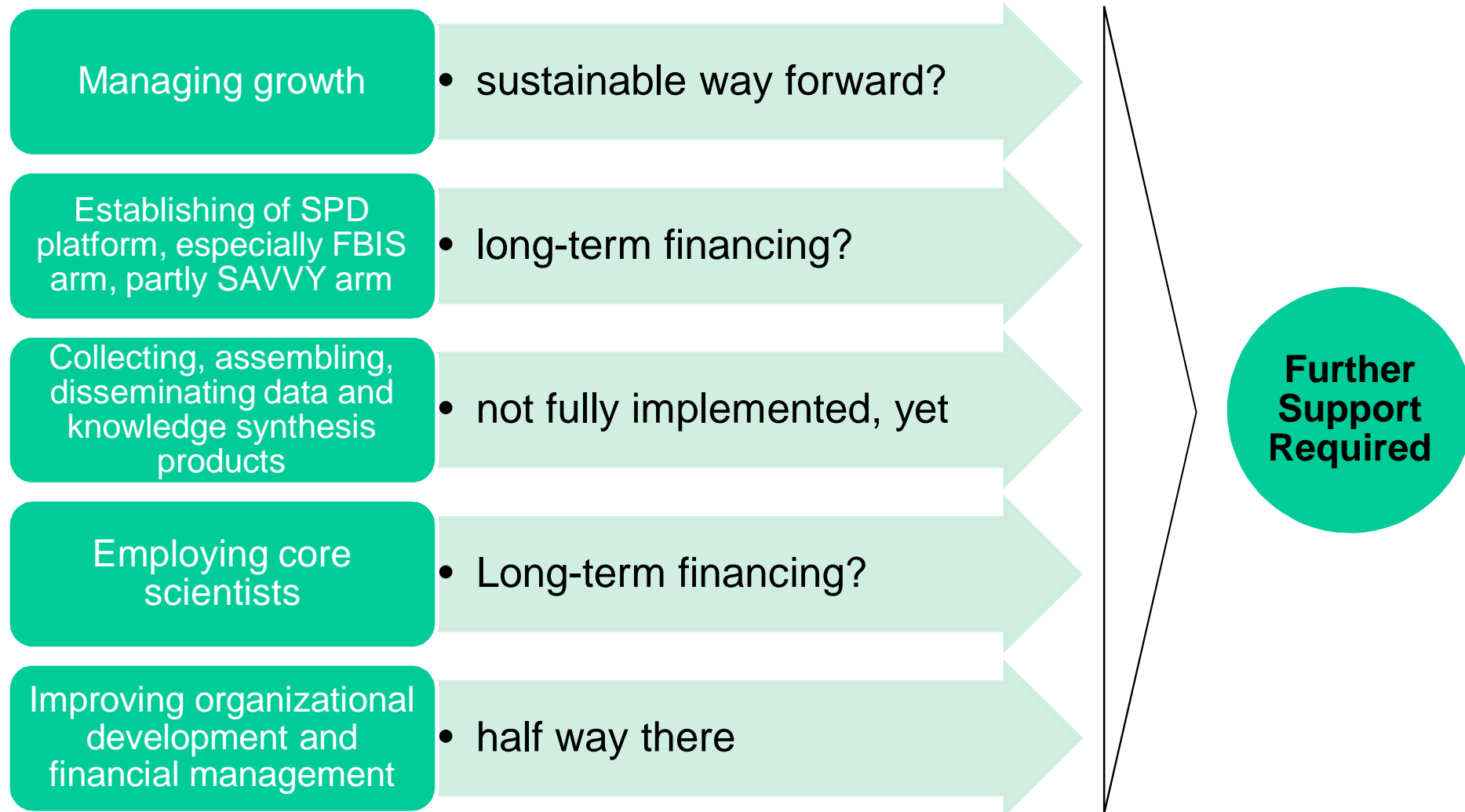
*Source: interpretation from the authors

Overview of the Evaluation Steps



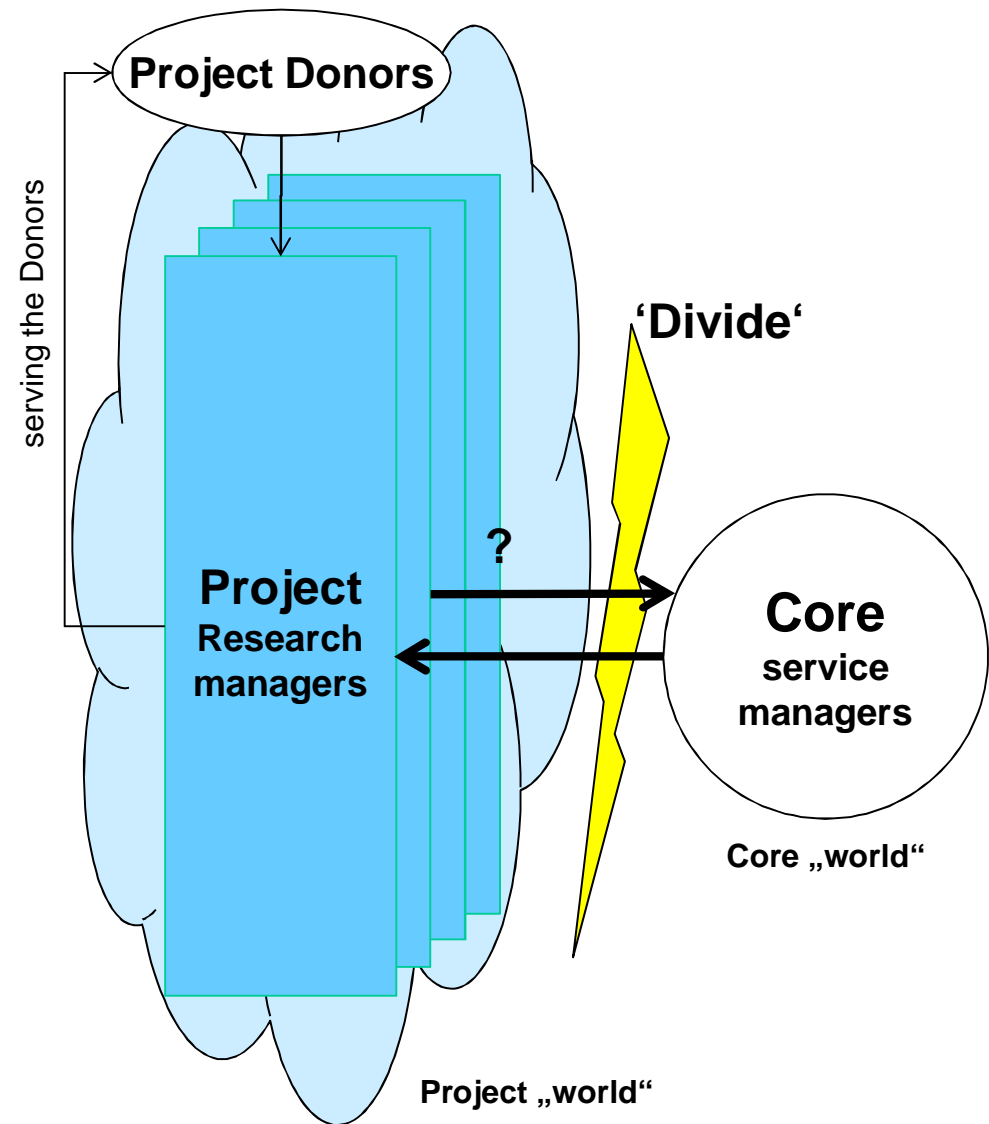
1. Overview and Approach
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Basic Findings: Which Have Been the Benefits of the Programme Partner's Support? Way Forward?



Key Evaluation Results: What Does IHI Want to Be in the Future and How?

- IHI - an 'AGENDA SETTING RESEARCH INSTITUTION' or a 'SERVICE PROVIDER FOR TENDERED RESEARCH PROJECTS'?
- Gross margin generating activity is not research, but research supporting services
- ...due to a 'principal-agent' issue:
 - If thematic groups would be managed as business units, scientists should aim at contributing a margin to core
 - Some researchers may be rather interested to secure funds and deliver services to donors at 'low cost' without margins and with low overhead contribution (OVC) for IHI
 - So, IHI services the scientists to do research, rather than the scientists are serving the institution
- New organizational structure strengthens innovation and delivery mechanisms, but is not solving the obvious principal-agent issue, yet
- Develop research-based business activities
- Improve financial systems efficiency and data accuracy through more integrated accounting system
- Mechanism to improve financial flexibility required



Objectives & activities	<ul style="list-style-type: none">• Check consistency of strategic plan with log frames 2008-2013• Balance achievements against both strategic goals and log frame objectives• Identify key activities• Focus on documented and proven evidence for indicators
Effectiveness of strategies	<ul style="list-style-type: none">• Ratio between input and impact• Analyze time lag between objective setting and implementation• Identify objectives carried forward due to delayed implementation and reasons why• Identify main determinants of success and of setbacks
Research activities	<ul style="list-style-type: none">• Review the list of all research projects 2008-2013• Group by research fields and cross-check with strategic plan 2008-2013• Group by funders• Analyze financial structure
Generation of business activities	<ul style="list-style-type: none">• Assessment of measures for long-term financial sustainability: types, customers, resources input, potential income, time• Evaluate any other project or activity carried out for the purpose of income generation• Identify bottlenecks and pearls of progress
Organizational assessment	<ul style="list-style-type: none">• Assessment of organizational structure• Accountabilities, management levels, efficiency in decision taking and implementation• Development and retention of young researchers and new leaders
Financial performance	<ul style="list-style-type: none">• Margin contribution from different income sources• Internal / external core cost contribution• Assessment of financial system: cost allocation; management of profitability on different levels

Logical Framework 2009 Review: GOAL

GOAL	Indicator	Milestone/ Target 2012/2013	Status achieved	Source/Mean of Evidence	Remarks
Public services improve health and reduce poverty in Tanzania	Life expectancy (gender disaggregated)	Male 62 Female 61 (2012)	Male: 63 Female: 66 (average 2009-2011 at birth)	IHI DSS estimates; SAVVY not available, yet	<ul style="list-style-type: none"> • National Population and Housing Census 2012 was done, but interfered with SAVVY implementation • Census results not yet available • SAVVY rollout also delayed by ethical approval • Target 2013 very likely to be achieved
	Under 5 mortality rate	On track to reach MDG target (67)	81 67 67,6	<ul style="list-style-type: none"> • TZ Demographic and Health Survey (DHS) 2010 (re 2005-2009) • IHI DSS Ifakara • http://mdgs.un.org 	<ul style="list-style-type: none"> • SAVVY delayed • last updated 2. Oct. 2012
	Maternal mortality rate	< 400 per 100,000 live births (2012)	454 460	<ul style="list-style-type: none"> • DHS 2010 (re 2000-2009) • http://mdgs.un.org 	<ul style="list-style-type: none"> • DHS data based on previous decade, needs to be re-viewed based on 2012 data • Tanzanian census done in 2012, but special MMR analysis not available before late 2013/early 2014 • SAVVY to be completed in 2013

Logical Framework 2009 Review: PURPOSE

PURPOSE	Indicator	Milestone/ Target 2012/2013	Status achieved	Source/Mean of Evidence	Remarks
Civil society, media and parliament use evidence to demand better performance from public services and government uses evidence to refine policy and service delivery	Quality constraints of evidence used in health sector annual review and Mkukuta reporting	Key deficiencies addressed and reports able to monitor progress towards key sector targets	Done	<ul style="list-style-type: none"> Spotlight 13 and sub-set of SPD indicators provided for JAHSR 2012 PCC reports for examples in previous years 	
	Media references for IHI studies / data	2012: 6 per month 2013: 8 per month	2012 done: 3x news-papers 3x TV/radio 20x Google Alerts - per month	<ul style="list-style-type: none"> IHI clipping statistics 	<ul style="list-style-type: none"> Online stories increased significantly in November following the announcement of the RTS,S Phase 3 malaria candidate vaccine results
	Awareness of policy relevant results from IHI data and other sources by policy makers	2012: 2 IHI data source citations in Health Sector Performance Report (HSPR) 2013: 4 citations	<ul style="list-style-type: none"> DSS cited SPD cited 	<ul style="list-style-type: none"> HSPR 	<ul style="list-style-type: none"> 2013 target not realistic
		2012: IHI data used in policy analysis & dialogue and public expenditure reviews 2013: Improved understanding on how health expenditures relates to outcomes	<ul style="list-style-type: none"> Not done much on expenditure analysis, not planning for 		<ul style="list-style-type: none"> However, Twaweza publishes in the IHI digital library, which observes more than 400 article downloads per month; powerful tool to put policy-relevant information in the public domain

Logical Framework 2009 Review: OUTPUT 1

OUTPUT	Indicator	Milestone 2012/2013	Status achieved	Means of Evidence	Limiting/enhancing factors
1. Enhanced capability to measure & monitor health progress	Existence of system for collecting data on service delivery	Sustainable, functioning system for collecting good quality, nationally representative data on service delivery is in place and producing annual data	Mostly achieved	FBIS fully operational in Nov 2012, but data completeness and accuracy still an issue	<ul style="list-style-type: none"> Platform functional, 30+ staff Data completeness and accuracy 65% Work in progress to improve data collection and quality assurance management from all the districts
		System has capability to provide enquiry on any aspect of health policy implementation	YES	• E.g. SARA (Service Availability & Readiness Assessment) on behalf of Global Fund	
		Data from SPD being used by MoHSW in sector reporting	YES	See subset of SPD indicators for MoHSW	
	Existence of system for regular production of vital statistics	Sustainable, functioning for collecting good quality, nationally representative vital statistics in place	Half way there	Roll out to final ten districts in early 2013; First full SAVVY report in 2013 incl. baseline figures from all districts	Full rollout of SPD as a platform required to start regular collection of data
	Existence and scope of IHI DSS	Evidence of use of data from new DSS modules by stakeholders	NO	„Nutrition in Children“ module implemented but not cntd.;	<ul style="list-style-type: none"> Agreement in May 2012 to skip this indicator DSS continues to generate information used by policy-makers and planners

Logical Framework 2009 Review: OUTPUT 1 (contd.)

OUTPUT	Indicator	Milestone 2012/2013	Status achieved	Means of Evidence	Limiting/enhancing factors
1. Enhanced capability to measure & monitor health progress	Expanded inpatient/outpatient monitoring system	Evidence of use of new data from stakeholders	NO	CSS report will be published soon	<ul style="list-style-type: none"> • Downgraded expectations • Not to be expanded • Rather interesting for researchers than policy makers

OUTPUT	Indicator	Milestone 2012/2013	Status achieved	Means of Evidence	Limiting/enhancing factors
2. Health sector monitoring services using existing and new information platforms	Quality and availability of DSS reporting	Annual DSS reports showing levels and trends of age/sex/cause specific mortality are produced each year, are easily accessible, of good quality and widely used	YES	Annual report 2011 available (see 31st BoT meeting minutes)	
	Quality and availability of SAVVY reporting	<p>Good quality annual reports are regularly produced, and made widely available</p> <p>Data from annual reports are used by MoHSW in sector reporting and by NBS in population estimation</p>	NO	<p>No reports for the covered districts, yet</p> <p>Data not available, yet</p>	<ul style="list-style-type: none"> • To be expected after full SAVVY roll out • How to increase attractiveness of writing • However, Spotlight 13, October 2012, addressed data of national interest and was published in the newspapers
	Quality and availability of service delivery data	Service delivery data from all health pillars available	Partially achieved	All FBIS data collected is available to MOHSW on a shared server	<ul style="list-style-type: none"> • Target questionnaire • SPD not designed to report on health pillars • Data quality to be improved

OUTPUT	Indicator	Milestone 2012/2013	Status achieved	Means of Evidence	Limiting/enhancing factors
2. Health sector monitoring services using existing and new information platforms	IHI direct engagement in health sector monitoring	Involvement of IHI in such work continues and grows in relevance and profile	YES	See Activity 2.4	MoHSW didn't pay IHI for its support and contribution
		Availability of reliable health service utilization and delivery data	Largely achieved	<ul style="list-style-type: none"> engaged in sector monitoring SPD platform recognised by MOHSW. FBIS is operational (albeit with some room for improvement on data quality) SAVVY roll out to be completed in early 2013 DSS continues to operate and feeds findings to MOHSW. 	<ul style="list-style-type: none"> Limiting: Data quality to be improved Enhancing: SAVVY will be accepted as a national tool

Logical Framework 2009 Review: OUTPUT 3

OUTPUT	Indicator	Milestone 2012/2013	Status achieved	Means of Evidence	Limiting/enhancing factors
3. Extended range & quantity of knowledge synthesis products	Production of Policy Briefs, Research Monitor (Topic Synthesis), and IHI Research Digest (Annual IHI abstracts)	4 quality briefs produced per year on topical issues 2 quality and relevant research synthesis products per year Annual research digest	YES YES YES	Documents available	<ul style="list-style-type: none"> Enhancing factor: building up a good data unit with skilled people
	Access to IHI data by third parties	Analysis is produced by third parties using IHI data sources	NO	See activities 3.2 and 3.3	<ul style="list-style-type: none"> Work in progress with 61 implemented data sets (e.g. DSS, all projects) Data recording and storage system with central server and pre-structured data bases for all projects under construction

Logical Framework 2009 Review: OUTPUT 4

OUTPUT	Indicator	Milestone 2012/2013	Status achieved	Means of Evidence	Limiting/enhancing factors
4. Enhanced access to information for health policy	Electronic subscriber base	Target 2013: 3000+ subscribers	NO Nov 2012: 810	Mail-chimp e-bulletin <ul style="list-style-type: none"> • 573 (92.7%) successful deliveries • 156 opens (27.2%) • 421 total times opened (with multiple opens) • 64 (28.8% of 156) unique opens 	<ul style="list-style-type: none"> • Will be analyzed internally
	Number of hits on IHI website / Digital library	1000 visitors / 2000+ hits per week Digital library 200+ hits per week	Almost there	Google analytics report: <ul style="list-style-type: none"> • At average, 3,000 hits per month since Jan 2012; 1,700 hits/week • October 2012: 112 unique visitors/week • 350 downloads/month 	<ul style="list-style-type: none"> • Very ambitious target • Trend growing fast since 2011 after implementing new platform with University of Southampton mid 2012
	Number of attendees at Annual Health Science & Policy Symposium	200+ attendees in 2012 symposium	YES, but modified approach	N2011: Malaria Forum 2010: Malaria, Health Finances, M&E 2009: Malaria, Quality of Care National Research Symposium with NIMR Each event with more than 100 attendees	

ACTIVITIES Log Template 2009 Review: Output 1

OUTPUT	ACTIVITY	Milestone 2012/2013	Status achieved	Means of Evidence	Remarks
1. Enhanced capability to measure & monitor health progress	1.1 Develop facility arm of Sentinel Panel of Districts (SPD)	Facility arm (FBIS) fully operational by 2012 in all (23) sampled SPD districts	YES	FBIS fully operational in Nov 2012	<ul style="list-style-type: none"> Platform functional, 30+ staff Data completeness and accuracy 65%, monthly report missing HMIS rollout with MoHSW to SPD + 5 regions
	1.2. Develop Sample Vital Registration with Verbal Autopsy (SAVVY) arm of sentinel panel of districts	SAVVY operational in all SPD districts by 2012	Half way there	Ten districts in 2013; First full SAVVY report in 2013 incl. baseline from all districts	Limiting factors out of IHI control
	1.3 Explore opportunities to generate additional information (e.g. on nutrition, HIV and possibly socio-economic variables) using the DSS	As per milestones & timeline agreed December 2009	NO	„Nutrition in Children“ module implemented but not cntd.; Consolidated Report = Spotlight 13	<ul style="list-style-type: none"> Agreement not to add new modules HIV module only used for MZIMA project DSS granted lower priority as compared to SAVVY and SPD modules
	1.4 Explore opportunities to extend the existing clinical surveillance system (outpatient and inpatient) at Bagamoyo and St. Francis hospitals to other clinics in the DSS areas (Ifakara Rufiji, Kigoma)	As per milestones & timeline agreed December 2009	NO	-	Subsequently granted lower priority, as all DSS data rather used for research projects than for national monitoring purposes; Instead, Facility Based Information System (FBIS) was pushed in all SPD districts

ACTIVITIES Log Template 2009 Review: Output 2

OUTPUT	ACTIVITY	Milestone 2012/2013	Status achieved	Means of Evidence	Remarks
2. Health sector monitoring services using existing and new information platforms	2.1 Produce annual reports from DSS system on all basic demographic variables, including leading causes of mortality /burden of disease	Annual report quality and regularity maintained to EOP	YES	Annual report 2011 available (see 31st BoT meeting minutes)	linked to 1.3
	2.2 Produce annual reports on inpatient/outpatient monitoring system	Annual report quality and regularity maintained to EOP	NO	Annual OPD/IPD report 2011 available, but not produced annually	linked to 1.4
	2.3 Production of reports from SAVVY system	2012 report on all agreed indicators in all sites	NO	First full SAVVY report available end of 2013 (see 1.2)	Malaria data used by NMCP for Global Fund report and various meetings and events
	2.4 Active IHI engagement in annual sector monitoring and programme M&E	IHI maintains level of demand throughout project period	YES	„Health Sector Performance Profile“ available for 2009, 2010	<ul style="list-style-type: none"> • 2011 MoHSW tried alone and didn't finished • IHI supported M&E • Stronger data basis needed
	2.5 Interpretation, secondary analysis and data mining of national surveys, such as the Demographic & Health Survey	At least one piece of specialist / secondary analysis work using IHI and/or other data sets – every 6 months	YES	13 Spotlights issued since August 2008 plus other pieces of work; IHI engaged to assemble data for JAHSR	<ul style="list-style-type: none"> • SPD data is national property on remote server • IHI can sell reports, but not the data • Good relationships with nat-+internat. Media, own editor

ACTIVITIES Log Template 2009 Review: Output 3

OUTPUT	ACTIVITY	Milestone 2012/2013	Status achieved	Means of Evidence	Remarks
3. Extended range & quantity of knowledge synthesis products	3.1 Produce: 1. Spotlight Policy Briefs 2. Research Monitor (Topic Synthesis) 3. IHI Research Digest (Annual IHI abstracts) 4. IHI News (new & ongoing research) 5. Press releases + briefings	1. One issue per quarter 2. One issue per 6 months 3. One issue per year 4. One issue per 6 months 5. 6+ produced per year	YES 1. Done 2. Done 3. Done 4. Stopped 5. Done	1. Hard and soft copies 2. Weekly web alerts on TZ health 3. Hard and soft copies 4. Started, but too expensive and not research related 5. Press releases	1. - 2. - 3. 28 abstracts to ASTMH 2012 conference 4. Now web based information available regularly 5. Own press releases + media stories i6+
	3.2 IHI Data Centralisation & Standardisation	Centralized, standardized databank maintained	Partially achieved	Verbal interview	<ul style="list-style-type: none"> • Work in progress with 61 implemented data sets (e.g. DSS, all projects) • Now standardized format and data documentation under implementation • Aligned to INDEPTH's INESS data set
	3.3 Provide public access to IHI data through user friendly query data sets and providing qualified access for 3rd party researchers	1+ collaborator per year to reanalyze IHI data until EOP	Partially achieved	Early pilot data portal with generation of demographic indicators directly from IHI databases	<ul style="list-style-type: none"> • Numerous examples of third party collaborators using IHI data for research • Ongoing work on front end for users to query data sets

ACTIVITIES Log Template 2009 Review: Output 4

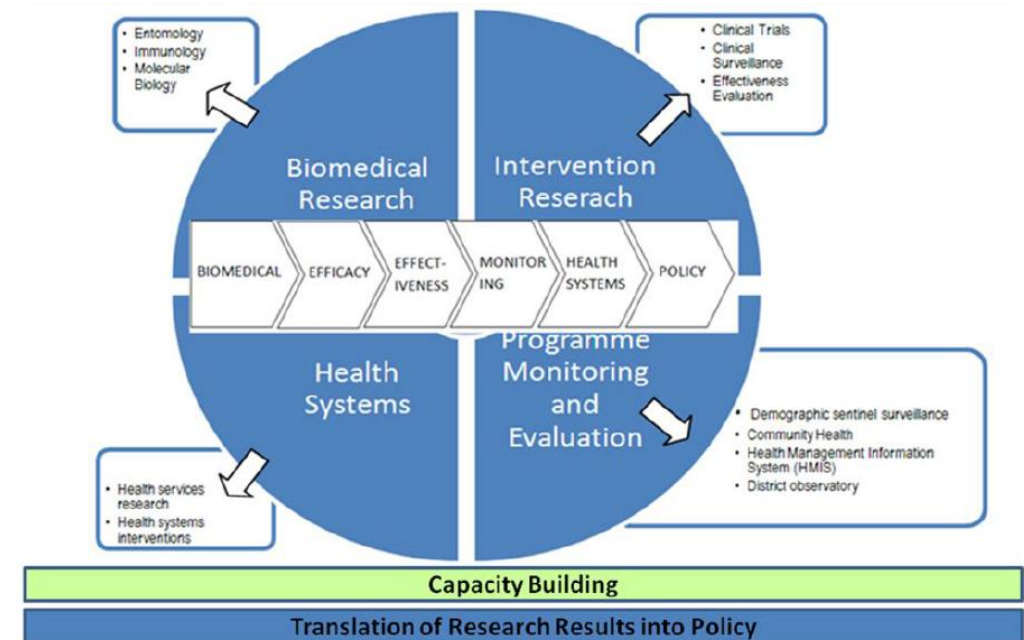
OUTPUT	ACTIVITY	Milestone 2012/2013	Status achieved	Means of Evidence	Remarks
4. Enhanced access to information for health policy	4.1 Launch Mark 2 IHI website	Website maintained	YES	www.ihl.or.tz	
	4.2 Establish digital library	Library maintained	YES	https://ihl.eprints.org/	<ul style="list-style-type: none"> e-prints, hosted by University of Southampton Provides a good opportunity to sort publications by year, subject, division and author 27 publications reported Jan 1 – May 11, 2012
	4.3 Host public seminars and presentations, and Research Dissemination events	At least 5 public seminars per year by EOP 5+ dissemination events per year	Partly	Number of hosted public seminars not achieved List of 62 oral & poster presentations 2011	2011: Malaria Forum 2010: Malaria, Health Finances, M&E 2009: Malaria, Quality of Care National Research Symposium with NIMR
	4.4 Build close relationships with the print, radio and TV media	20+ newspaper pieces 5+ TV/radio pieces annually until EOP	YES	Press cuttings (copies of TV and radio records not accessible)	<ul style="list-style-type: none"> IHI has managed to generate a pull from the media Listserve less 1,000 people (like email newsletter)
	4.5 Convene and organise an annual Scientific Health Policy Symposium once p.a.	Symposiums conducted annually until EOP	NO	conscious decision to contribute to the annual NIMR-led symposium instead of starting a second on	<ul style="list-style-type: none"> organized several Knowledge Forums co-funded NIMR symposium

Conclusions from 2009 Logical Framework Review: 7 out of 17 Milestones Fully Achieved



- Capability to measure & monitor health progress was not fully achieved as envisaged in Output 1, but there was also a shift from DSS towards the more country relevant SPD platform; ten remaining SAVVY districts will be implemented until March 2013
- IHI has not fully produced the required reports, some of them linked to the full rollout of the SPD platform, but it has actively engaged in sector monitoring and significantly increased its scientific exposure and media presence (Output 2)
- IHI has achieved almost all targets with regard to production of synthesis products, having skipped one (newsletter) intentionally; however, data standardisation and sharing is still under implementation (Output 3)
- With the revised website and online digital library, IHI has clearly improved its presence on the www; however, more can be done. The active involvement in relevant events and congresses has not yet fully reached the level set in the logical framework (Output 4); however, there was a shift towards several more focused forums instead of one big event

- Biomedical & Environmental
 - Immunology
 - **NEW: Epidemiology**
 - Molecular Biology
 - Entomology
 - NEW: field assessments
 - NEW: climate change impact
- Intervention Research
 - Clinical Trials
 - Clinical Surveillance
 - Efficacy & Effectiveness Evaluation
- Health Systems
 - Health services research
 - Health systems interventions
 - NEW: electronic data capture tools
 - NEW: training
 - NEW: secondary data analysis
- Program Monitoring and Evaluation
 - Demographic sentinel surveillance
 - Health outcome & impact evaluation
 - Commissioned evaluations



Source: „Research at IHI“, 2011, p. 47

Rough Consistency Check Between Logical Framework and Strategic Objectives of the Institution: What Gets Measured?*

RESEARCH	Objective 1: Disease determinants of leading public health problems are understood	Output 1: Measure & monitor health progress Output 2: Monitoring services using IHI platforms Output for “developing interventions”?
	Objective 2: Interventions against diseases of public health importance are evaluated	
	Objective 3: Health system interventions for maximum coverage, quality and effectiveness are <u>developed</u> & evaluated	
	Objective 4: The impact of national and global initiatives in improving population health are monitored and evaluated	
TRAINING	Objective 5: Human resource capacity is strengthened through execution of joint training programmes with universities	No output for “training”
SERVICES	Objective 6: Evidence-based policy formulation and translation of research results into public health action is promoted	Output 3: Extend knowledge synthesis products Output 4: Enhanced access to information for policy
INSTITUTIONAL DEVELOPMENT	Objective 7: Institutional capacity for ensuring sustainability is strengthened	Specific output for “institutional development”?

Source: IHI Strategic Plan 2008-2013

*based on Log Frame 2009 revised format

Broader Scope of IHI's Own Definition of Strategic Activities Compared to Programme Partner's Preferences

- The strategic approach of the Ifakara Health Institute addresses various research areas, training services, and operational and administrative excellence
- As the four program partners had and still have different agendas with regard to their bilateral support towards Tanzania, there was a need to find the minimum denominator when drafting the logical framework in 2009 in order to „harmonize“ donors
- Hence, the logical framework put emphasize on monitoring health progress using IHI's information platforms and by contributing with knowledge synthesis products to Tanzania's health policy, but was not ment to serve as a management tool
- The strategic goals of IHI go beyond the logical framework outputs and need to be considered in this evaluation in order to better understand the institute's overall performance
- Measuring performance internally against the strategic objectives was just started in 2012 in Finance & Admin, but not in the 'core business' (research), yet

Assessment of Strategic Objectives and Reflection within Logical Framework Outputs (I)

Strategic Objectives	Components	Strategic Direction	Remarks	Related Log-frame Output
Objective 1: Biomedical & Environmental	Entomology Immunology Molecular Biology	<ul style="list-style-type: none"> Continuation & modest expansion of ongoing work, with particular focus on innovating new tools 	<ul style="list-style-type: none"> Biomedical: done Environmental: strong activities as regards fellowship, grants, products and public awareness (Discovery Channel) 	Output 1-4 partly
Objective 2: Disease Intervention Efficacy & Effectiveness	Clinical Trials Clinical Surveillance Effectiveness	<ul style="list-style-type: none"> Continue & extend clinical trials on malaria, TB & HIV drugs, vaccines, diagnostics, tools Clinical surveillance (OP, IP) for effectiveness evaluation & pharmacovigilance Evaluation of malaria, TB & HIV Interventions Evaluation of maternal & newborn interventions Burden & effectiveness studies on emerging threats (NCDs) 	<ul style="list-style-type: none"> Done (IPTP, MAL55, TB H1 vaccine) GENZERO, Staphyl., PeDiAtrick PRIMAQUINE, TB Child, HIVDR etc. Several projects EASY CARE project 	Output 1 Output 2
Objective 3: Health Systems Interventions Developed and Evaluated	Health System Research Health System Interventions	<ul style="list-style-type: none"> Health financing, equity, human resources, service delivery Vulnerability, cash transfers, payment-for-performance Improving equitable access to, and operational effectiveness of, essential health programmes & interventions 	<ul style="list-style-type: none"> E.g. MNH+, Concern, COMDIS-HSD PRAC-TZ, Pwani P4P, Bima Wazazi Bima Pamoja, ACCESS, Mobiles for Life 	Output 1 Output 2

Assessment of Strategic Objectives and Reflection within Logical Framework Outputs (II)

Strategic Objectives	Components	Strategic Direction	Remarks	Related Log-frame Output
Objective 4: Population Health Programme Monitoring & Evaluation	Longitudinal morbidity and mortality trends Community health status, behaviour, risks Service-based statistics monitoring in selected areas Bespoke programme M&E	<ul style="list-style-type: none"> • Continue DSS in 3 districts • Add new DSS modules e.g. morbidity / nutrition / disease prevalence / risk factors • Social determinants of health • Morbidity & mortality profiles • Establish sentinel panel of districts for monitoring health system performance 	<ul style="list-style-type: none"> • Done • No • Done • Done by end of 2012 	Output 1 Output 2
Objective 5: Training	Health HR capacity in TZ Joint training programmes Specialist training courses Infrastructure development Distance learning	<ul style="list-style-type: none"> • Develop skills, expertise and formal qualification • Partnerships with national and international universities • Develop curricula • Develop and implement training facilities 	<ul style="list-style-type: none"> • Done, e.g. PhDs • Nelson Mandela University • Master Course in Public Health • Not achieved, but existing MoU with TTCIH 	None
Objective 6: Policy Formulation and Action	Improvement of quality of care Scientific services Research impact and public benefit	<ul style="list-style-type: none"> • Include financial, material and human support in clinical trials • Accredit Ifakara and Bagamoyo as national reference labs • Data sets available for secondary research • Analytical services • Digital library, policy briefs • Peer review journal publications increased 	<ul style="list-style-type: none"> • Done • Pending • Not yet • Done • Done • Done 	Output 2 Output 3 Output 4

Assessment of Strategic Objectives and Reflection within Logical Framework Outputs (III)

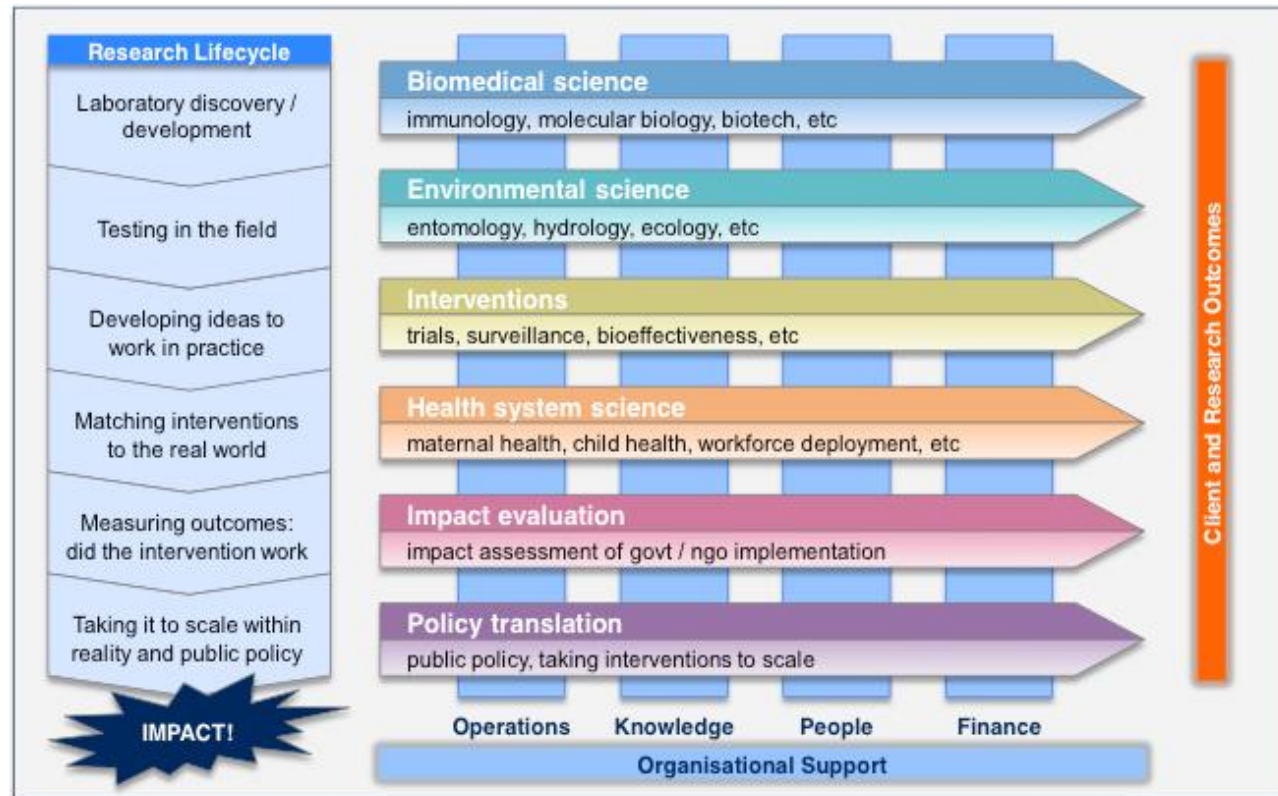
Strategic Objectives	Components	Strategic Direction	Remarks	Related Log-frame Output
Objective 7: IHI Institutional Capacity Strengthening	Re-structuring Financial security Financial management function HR management function IT systems	<ul style="list-style-type: none"> • After 2009 implementation of strategic planning • Core contribution & PPC agreement • Lines of responsibilities & job descriptions • Harmonization of salary scheme • Improvement of financial systems • Updated administration manual • Functional IT & intranet, major gaps identified • Regular Scientific Committee meetings • Monthly Management Committee meetings etc. 	<ul style="list-style-type: none"> • Done • Done • Done • Done • Done • Done • Done • In progress • Done • Done 	Partly Outputs 3+4

Redefined Areas of Research in the Thematic Groups as a Result of the New Strategic Plan



- 'Biomedical & Environmental' split into 'Biomedical' and 'Environmental'
 - Epidemiology recently suggested as thematic sub-theme due to projects in this area
 - Field assessments (in Biomedical):
 - Moving the identified potential products of existing technologies to commercialization
 - Better understanding of the contribution of different vector control tools in tandem or rotationally
 - Climate Change Impact (in Environmental):
 - Using the semi-field system
 - Predicting change in patterns and behaviour of disease-causing vectors due to climate change
- New areas in 'Health Systems':
 - Electronic Data Capture Tools:
 - Support surveillance of diseases like Malaria
 - Training:
 - E.g. community health workers
 - Secondary Data Analysis:
 - Utilization of DSS or SPD data by other research institutions or even companies (through Research Services department)
- 'Program Monitoring & Evaluation' split into 'Impact Evaluation' and 'Policy Translation'

New Thematic Groups Along the Research Lifecycle



*Source: New Strategic Plan 2013-2018

Recommendations with regard to „Strategic Achievements“

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
1.	Strategic planning & controlling				
1.1	Implement strategic controlling	Develop project accounting into project controlling (see section „Financial Performance“)	Strengthen Management by Objectives (MbO), reduce Manageemnt by Accident (MbA)	AAA	asap
1.2	Thematic business units planning	Create strategic sub-plan for every thematic business unit	if the thematic areas are supposed to be managed like business units, research related strategic goals should be more specific	A	Implement by 2014
1.3	Set financial targets	Add quantitative data to mid-term objective setting	Current objectives are rather descriptive than supporting the financial sustainability	A	For financial year 2013-2014
1.4	SPD rollout, regular reporting and sustainable financial solution	Fully establish SPD platform in 23 districts including FBIS and SAVVY; find new funding structure	Stabilize research and policy driving platform	AAA	2013
1.5	Maintain data synthesis output and improve data standardization and access	<ul style="list-style-type: none"> • Solve internal leadership issues • Solve external partnership issues 	Reliable and accessable data basis	B	2013

Recommendations with regard to „Strategic Achievements“

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
2.	Thematic Areas				
2.1	Interventions: Fully utilize trial clinic	Attract more clinical trials	Amortize financial investment	A	ongoing
2.1	Training: Consider existing partnerships, e.g, TTCIH, in development of new infrastructure	Explore joint training centre in Dar	Resources saving	B	
2.3	Policy: Accreditation of Ifakara and Bagamoyo laboratories for national reference	Pro-actively pursue accreditation process	Stir motivation of policy makers to utilize and involve IHI	B	
3.	Institutional Capacity Strengthening: Full Operational Excellence (OpEx) implementation	Find agreement with core partner	Ensure sustainability of IHI	AAA	2013-2018

Objectives & activities

- Check consistency of strategic plan with log frames 2008-2013
- Balance achievements against both strategic goals and log frame objectives
- Identify key activities
- Focus on documented and proven evidence for indicators

Effectiveness of strategies

- Ratio between input and impact
- Analyze time lag between objective setting and implementation
- Identify objectives carried forward due to delayed implementation and reasons why
- Identify main determinants of success and of setbacks

Research activities

- Review the list of all research projects 2008-2013
- Group by research fields and cross-check with strategic plan 2008-2013
- Group by funders
- Analyze financial structure

Generation of business activities

- Assessment of measures for long-term financial sustainability: types, customers, resources input, potential income, time
- Evaluate any other project or activity carried out for the purpose of income generation
- Identify bottlenecks and pearls of progress

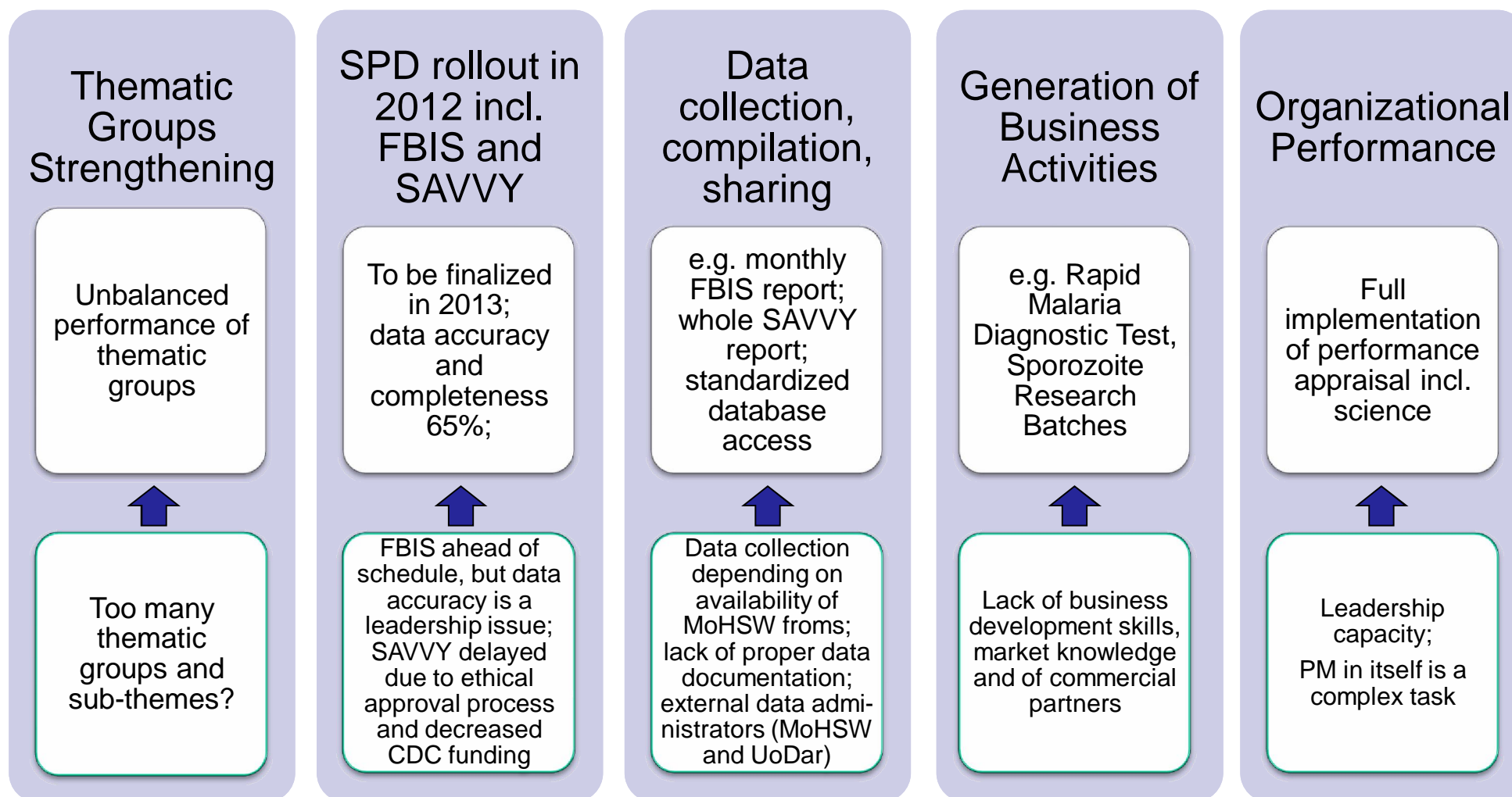
Organizational assessment

- Assessment of organizational structure
- Accountabilities, management levels, efficiency in decision taking and implementation
- Development and retention of young researchers and new leaders

Financial performance

- Margin contribution from different income sources
- Internal / external core cost contribution
- Assessment of financial system: cost allocation; management of profitability on different levels

Areas Where IHI Could AND Should Improve Its Strategic Effectiveness” *



*excluding downgraded DSS network

Recommendations with Regard to „Effectiveness of Strategies“

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
4.	Effectiveness of Strategies				
4.1	Readdress strategic focus	Does IHI have the resources to manage the broad range of thematic areas?	Reduce complexity Re-align resources Improve performance	AAA	New strategic plan
4.2	Re-establish IHI as an agenda setting research hub	<ul style="list-style-type: none"> • Pro-actively contribute to the research agenda in TZ and Eastern Africa • Pro-actively approach funding agencies and develop research designs and interventions 		AAA	2013 onwards
4.3	Accelerated implementation of business ideas (see section „Generation of Business Activities)	<ul style="list-style-type: none"> • Develop business plans • Identify implementing commercial partners • Attract investors 	Build additional income source in consistence with thematic areas	A	2013 onwards
4.4	Measure and improve organisational performance	<ul style="list-style-type: none"> • Rollout performance appraisal to entire organisation, especially science 	Set individual performance targets to align individual performance to IHI interests	A	2013

Objectives & activities

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Organizational assessment

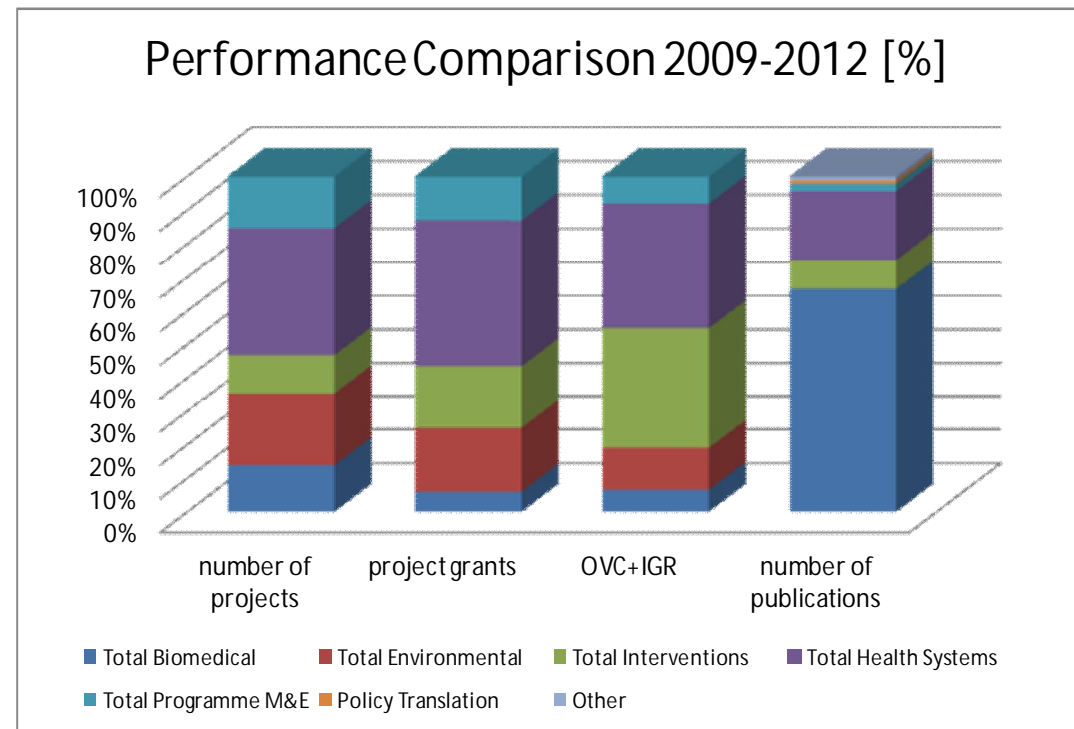
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Performance Comparison of Thematic Groups

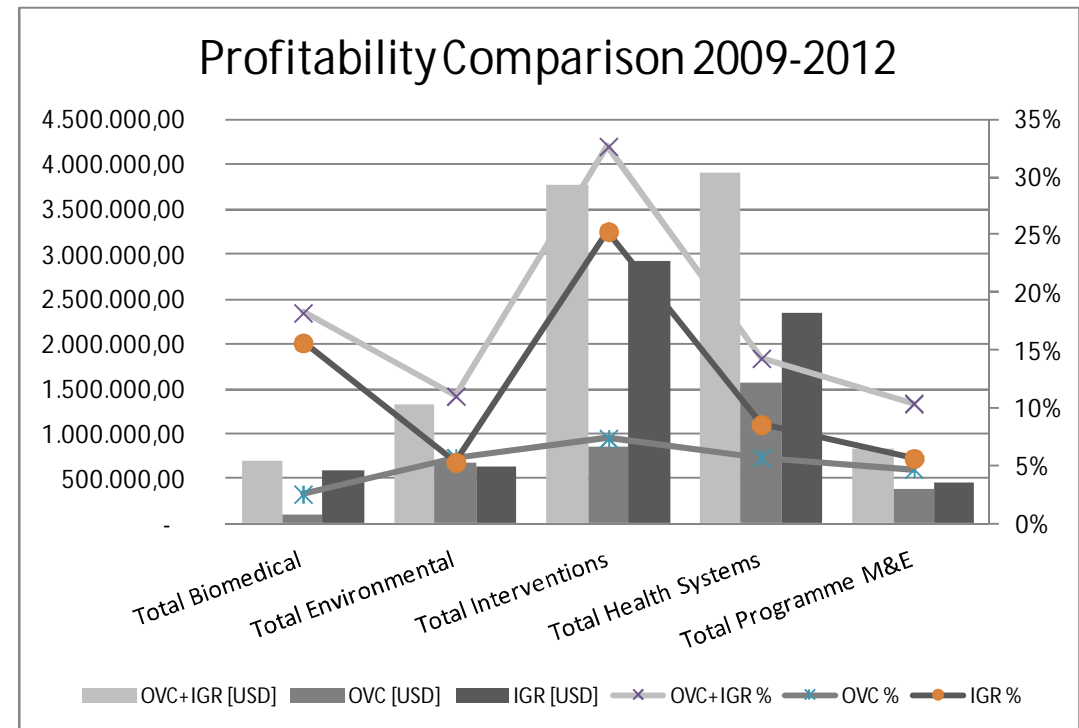
- Compared to the number of projects, Interventions and Health Systems projects generate grants above average, Biomedicals and Environmental below average
- As regards Overhead Contribution (OVC) and so-called Internally Generated Revenue (IGR), again Interventions and Health Systems are the actual margin generators
- Biomedicals are strong in publishing given their long history and knowledge base, but not contributing to the same extent to finance; Environmental and especially M&E could contribute more to publications
- Manual Compilation of the figures by IHI was extremely difficult and time consuming, as project accounting is not integrated into the accounting system



Note: no reliable financial data available before 2009

Profitability Comparison of Thematic Groups

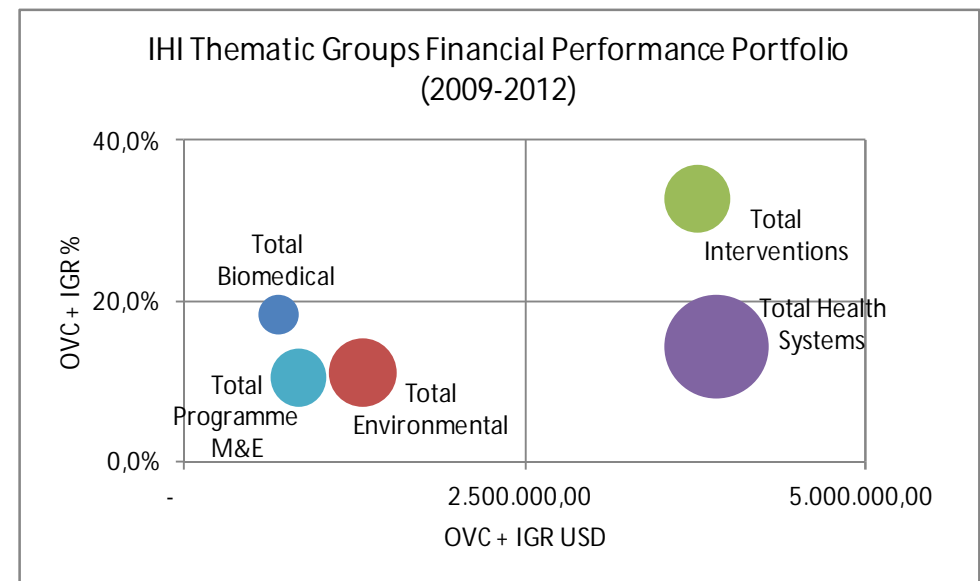
- Overhead Contribution (OVC) 2009-2012 remains below 8% across all thematic groups
- In Biomedicals, historically the IHI main thematic group, cumulated OVC in three years was below USD 100,000 and below 2,6% of research grants
- In relative figures, Interventions generate the highest contribution margin both in OVC and Internally Generated Revenue (IGR)
- grant volume should be increased!
- In absolute figures, the Health Systems thematic groups is currently the OVC cash cow - but not the most profitable one!
- Not turning IHI into a financially driven organisation, but a balanced one by applying reasonable instruments and tools from the commercial world



Note: no reliable financial data available before 2009

IHI's Portfolio of Thematic Groups from the Financial Perspective

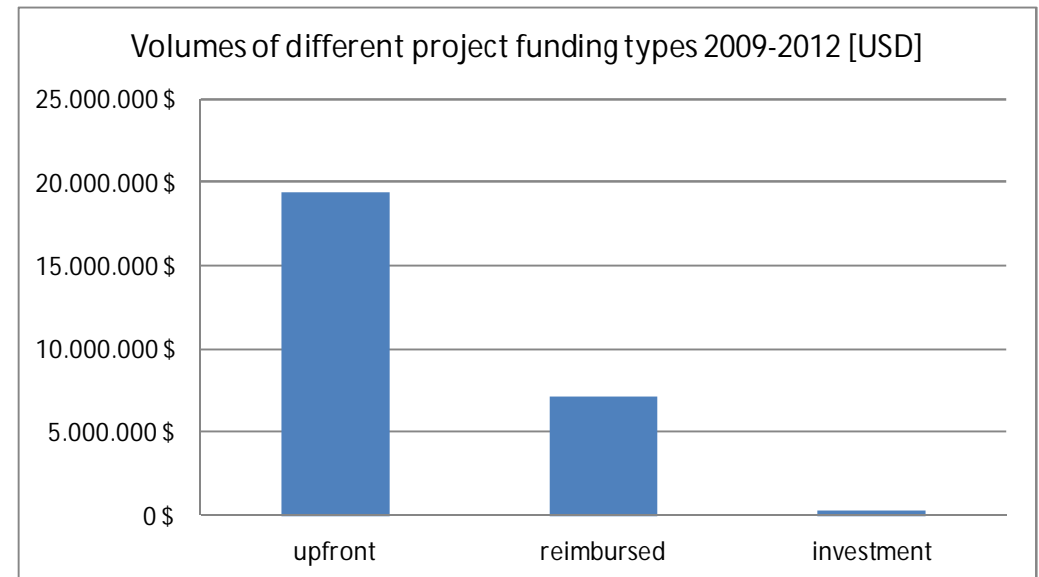
- The biggest thematic group 'Health Systems' generates the highest OVC+IGR in absolute figures; assumingly due to its volume, the relative margin is rather low
- 'Interventions' (clinical trials, clinical surveillance, effectiveness evaluations) generate almost the similar volume of OVC+IGR, but are much more profitable
- The relatively new thematic group 'Programme M&E' is still small and not very profitable
- Given the historical track record of IHI's traditional thematic groups 'Biomedical' and 'Environmental', they were rather underperforming but growing in IGR from 2010/2011 to 2011/2012



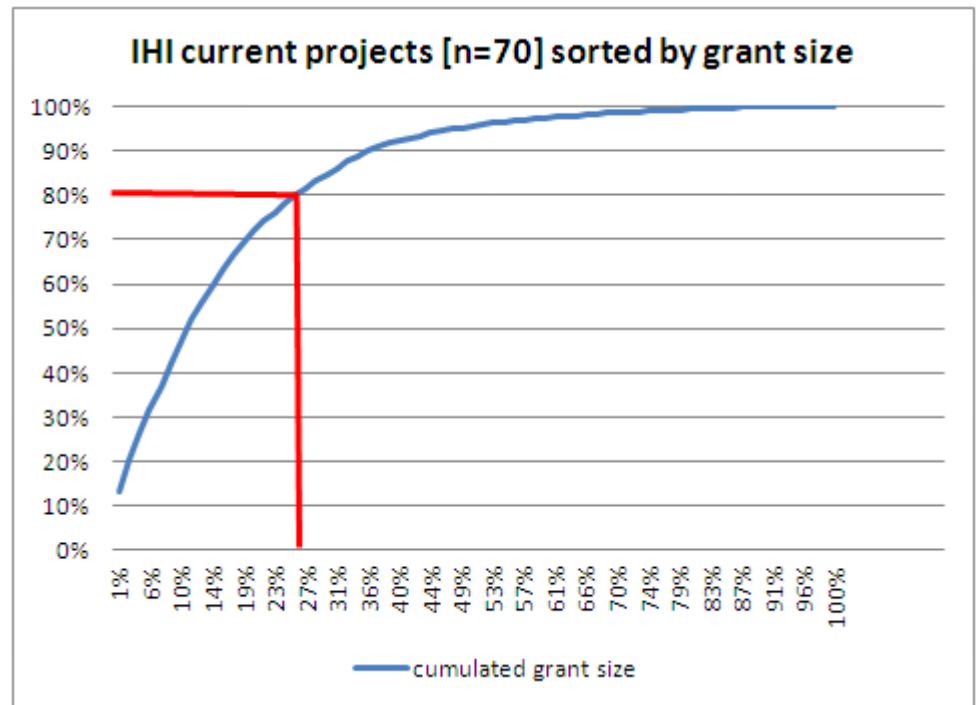
Bubble size equals total grants volume

Three types of projects:

1. Majority is upfront payments and instalments: more favourable to IHI
 - Though, research donors usually provide just quarterly instalments, thus hampering mid term planning
2. Based on reimbursements: need for IHI to prefinance approx. 25% of project volume
3. Investment projects: no initial donor, but hopefully subsequent 'customers'
 - e.g. Kingani trial clinic inaugurated in February 2012 and running the first trial in the very same month
 - In the case of the DSS platform, it never paid off, as there is no specific donor and IHI is incurring the costs

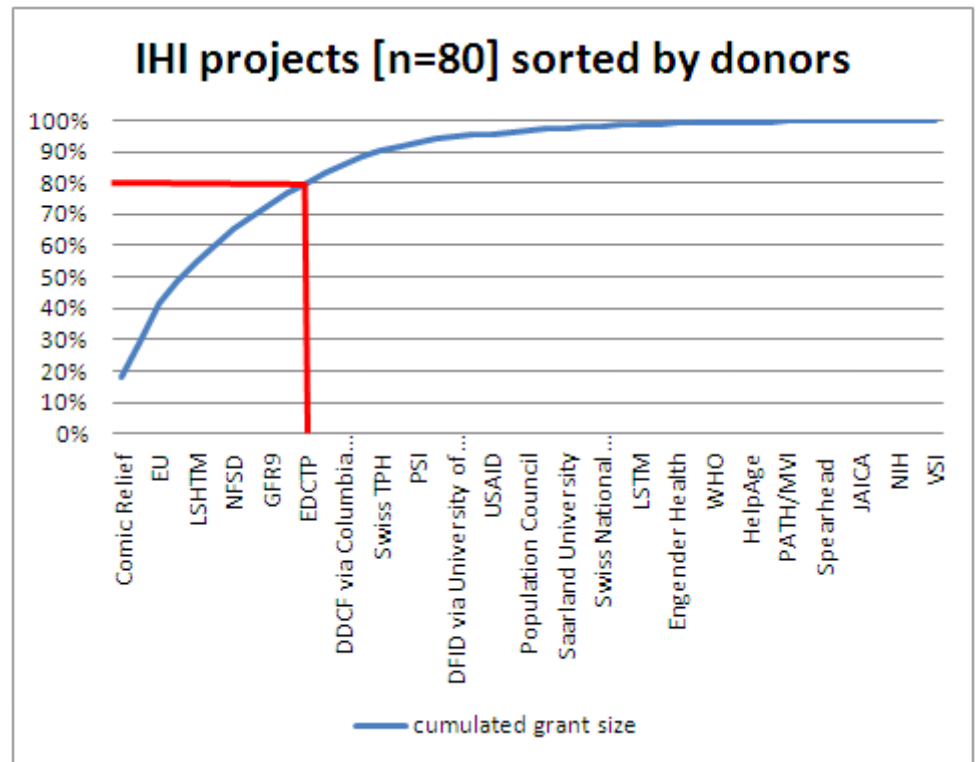


- IHI has a balanced portfolio with regard to project size
- Not fully depending on individual projects
- 25% of projects generate 80% of grants (slightly better than the typical 80/20 distribution)

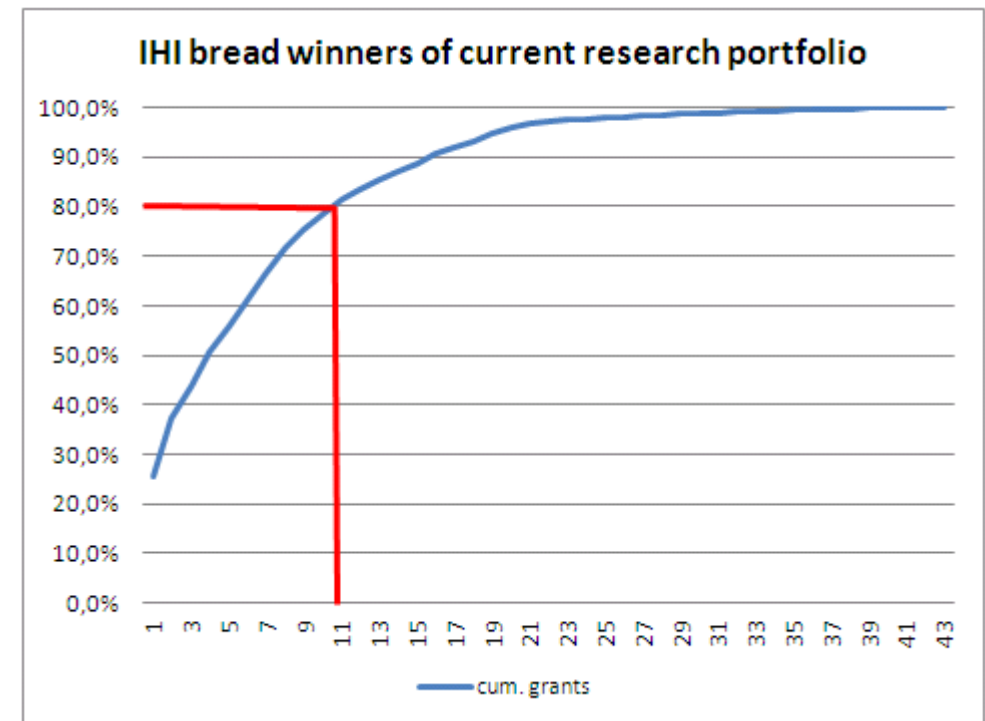


Four Large Project Donors

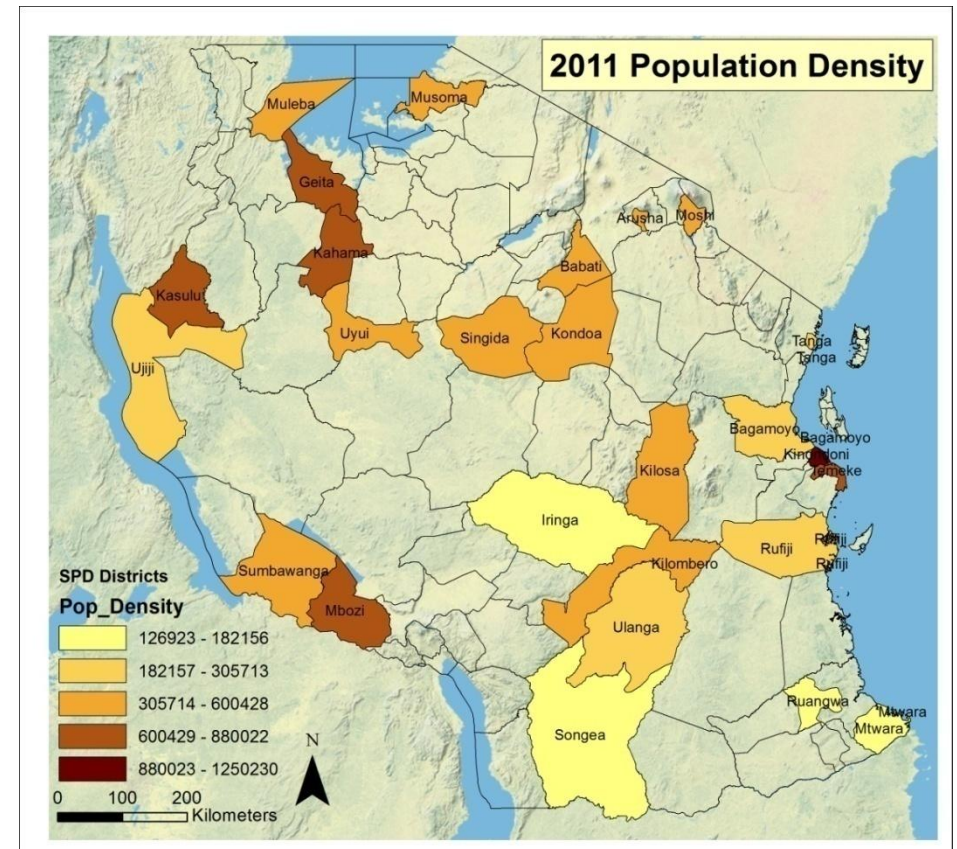
- With regard to donor dependency, the ABC analysis provides a similar picture:
 - 25% of the donors make up for 80% of project grants
 - However, the four biggest donors account for 50% of project grants (all direct and indirect BMGF grants consolidated)



- 11 project leaders out of 43 generated 80% of grants from the current project portfolio
- However, No. 1 senior bread winner generated 26% of total research grants income, equalling USD 15.7m = urgent succession issue
- Project leaders are not always the canvassers; in some cases, the Principal Investigators (PI) will delegate the project management to somebody else
 - different roles not reflected in the project accounts
- 20 projects < USD 100,000; so, which is the minimum size of a research project with a chance to pay off?

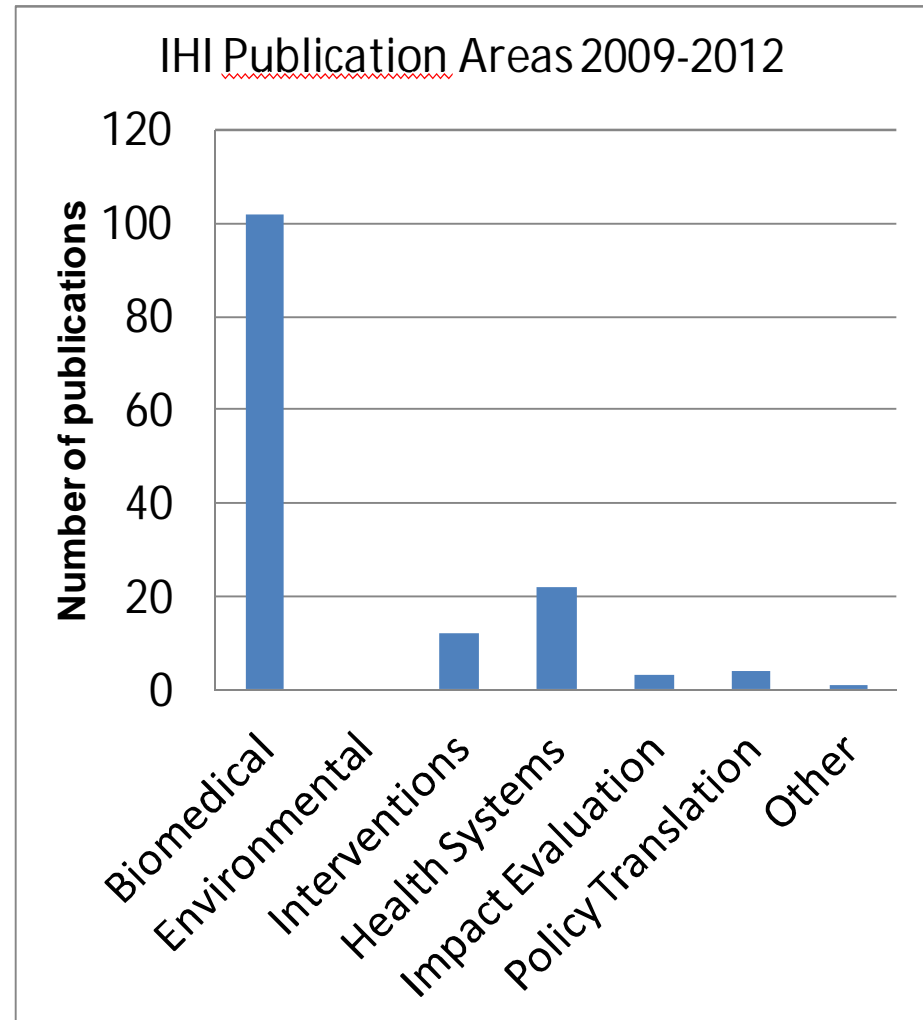


- Currently, further funding not secured:
 - FBIS depending on programme support (DFiD)
 - SAVVY depending on CDC, partly PPS
- Basically, platforms are rather used for free and not properly charged to the research projects
- Hence, adequate pricing is required, but also further early stage and interim funding before generating sufficient programmatic income with the platforms



Research Activities: Publications Focused on Few Areas and Bread Winning Authors

- Strong focus on publications linked to biomedical research
- Within biomedical research, the focus is on publications linked to Malaria (2012: 18 publications), building on the long tradition and knowledge base IHI has in this field
- However, the expanded range of thematic groups is not reflected yet in publishing activities
- From the Top 10 list of authors, only five can be found in the list of top bread winners



- Common failure rate of project proposals in the Steering Committee is low at 10-20%
- Initially, IHI pursued defined activities within the thematic groups
- As the need for M&E got stronger, IHI developed these skills and increasingly applied for public tenders, including Costech
 - Today internal discussion: is M&E a research activity or a consulting service?
- In many cases, especially US funded projects, IHI is not the direct payee as it is not registered as a US chapter 501(c) charity
 - For instance, in the Vitamin A project, BMGF provided a grant to the WHO, the WHO to the Harvard School of Medicine, and the Harvard School to the IHI; only 60% of the grant arrived in the bank accounts of IHI and the project was underbudgeted
- Scientists are not always good project managers - need to strengthen project accountants and develop controlling skills

- ...creating an internal thematic group platform consisting of:
 - Scientific leader, ideally with management skills
 - Project controller for proper pricing and tracking of financial performance
 - Potentially market research for marketing & sales purposes (optionally in a central unit)
 - Report writing support (optionally in a central unit), focusing on relevant data gathering
- ...creating proper accounting and reporting systems:
 - Integrated project accounts module
 - A cost centre for every project
 - Reporting templates for every project
- ...using proper structure & systems to set strategic objectives in each thematic group and measure against
- ...properly defining "Growth":
 - People?
 - Projects? E.g. avoid projects that do not fit into any thematic group, e.g. pit latrines
 - Project size?
 - Profitability of projects (not of IHI)?
 - Quality?
 - Funding base?

Recommendations with Regard to „Research Activities“

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
5.	Research Activities				
5.1	Readdress strategic focus (see recommendation 4.1)	Assess market potential of different thematic groups	Either strengthen the neglected thematic groups or focus on the bread and butter winners	AAA	New strategic plan
5.2	Proper pricing and margin management	Develop skills and tools of project accounting	Generate sufficient financial resources for IHI to sustain	AAA	
5.3	Research quality assurance and standardization	Identify gaps and bottlenecks	„Maintain standards!“	AAA	
5.4	Different funding mechanisms for Investment projects	Look for other options instead of financing from own working capital	Increase financial stability	A	
5.5	Chapter 501 (c) registration	U.S. based attorney needed	Secure full funds from US based donors	A	
5.6	Consider establishing thematic group platforms	Define structure, functions, roles, responsibilities, cost centres, reporting templates, objective setting procedure	Strategic management of thematic groups	AA	2013-2014

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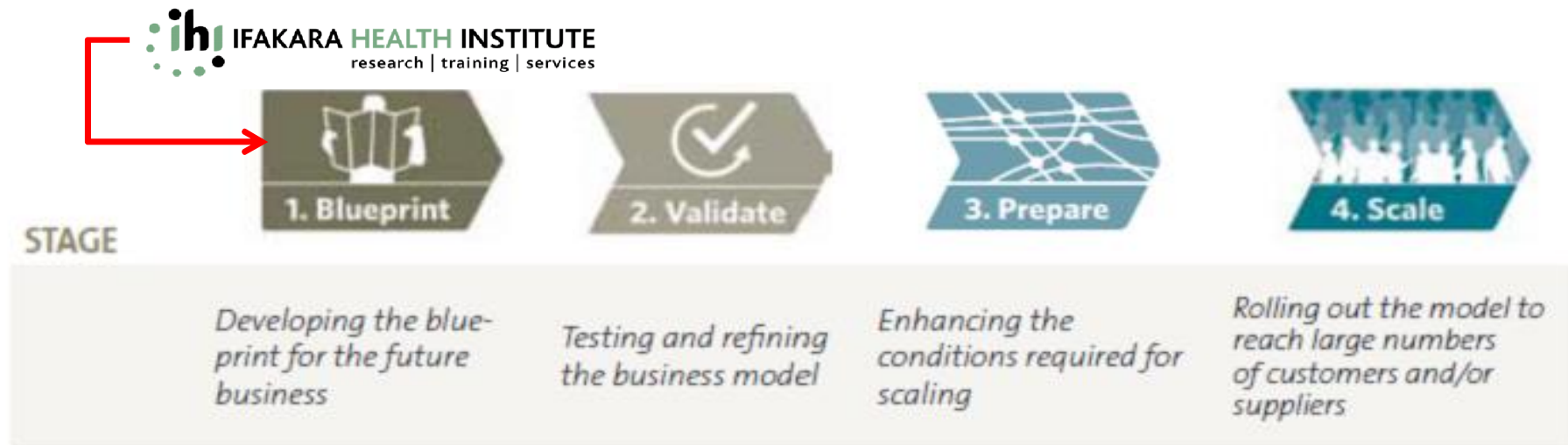
Financial performance

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- Definition of 'Business Activity':
 - "Business activities are pursued in order to generate a gross margin contribution to the core institution." (IHI definition during a workshop on the 5th of October 2012)
- Current types of such income:
 - Internally Generated Income (IGR): research supporting services invoiced to the research projects
 - Overhead Contribution (OVC) from research projects based on research grant structure
 - Institutional Dedicated Funds (IDF): not earmarked, but restricted for research infrastructure support (2011-2012: 1.4bn TZS)
- Hence, to date the means of generating business activities and gross margins consisted in hiring resources and invoicing them to the research projects
 - There is an incentive for the internalisation of service margins from data management, transport services, laboratory services, and other
- An assessment of activities subject to insourcing or outsourcing is under preparation; however, given the current incentivisation, it is more likely that more services will be internalized

- With regard to the 'core business', called research:
 - What does it mean to regard the thematic groups as 'business units'?
 - Is there a specific business development plan in place for all of the business units?
 - How will they manage and finance the so-called investment projects, e.g. Kingani trial clinic?
 - Strengthen neglected thematic groups or make a portfolio selection?
 - Return to the agenda setting pathway
- Lots of recommendations for within the thematic groups in 'Securing the Future - Ifakara Health Institute 2012-2017 and beyond'

New Business Opportunities: Need for Blueprint First



Source: „From Blueprint to Scale“, Monitor Group & Acumen Fund, 2012

- IHI needs to first draft a brief business proposal, containing:
 - Description of the product or service and IHI's contribution
 - Description of the target market
 - Rough assumption on market volumes and development
 - The institutional model (outlicensing, JV, Do-it-yourself)
 - Estimated initial investments
 - Estimated revenues and returns over time
 - Risk assumptions
 - Social impact

Definition: 'IHI defines business opportunities as income generating activities which:

- Establish new sources of income and reduce the dependency on project grants and core donor support
- Generate a positive gross margin
- Build on IHI's scientific expertise and knowledge base.'

The following business opportunities have been selected by the IHI management:

1. Rapid Malaria Diagnostic Kit
2. Medical devices and supplies
3. Sporozoite research batches
building on the opportunity of an upcoming biopark as a business creation platform in Kigamboni

How Can IHI Prepare for the Generation of New Business Activities Creating Real External Revenue?

1. Blueprint:

- Apoint business development team with administrative, not scientific project manager, as part of new „Development & Strategic Partnerships“ unit
- Set timelines and budgets
- Design products
- Collect market data
- Draft business plans
- Leverage existing relationships with donors and clients
- Build external partnerships with manufacturing experience
- Build internal capacity and recruit appropriate staff, e.g. for „Development and Strategic Partnerships“
- Secure infrastructure, e.g. Kigamboni biopark

2. Validate:

- Implement pro-actively!
- Leverage existing relationships with donors and clients
- Establish Key Account Managers

3. Prepare for Scaling

4. Scale

Business Opportunity: Rapid Malaria Diagnostic Tool (RMDT)

- Technical knowledge available at IHI
- Clinically tested
- Knows, „how to do it“
- As Malaria control intensifies, diagnostics need to be more sensitive to work in environments with low parasitemia
- National and international market available
- Both one Tanzanian and one international partner potentially available
- Could be hosted in the Dar biopark which will be opened in Kigamboni
- Initial investment approx. 1mn USD with 800 kUSD from TZ private partner

- Business opportunity with simple commodities as an entry point
- Mosquito trap also a potential product for this pipeline
- Initial investment approx. 1mn USD
- Complexity of products could be increased over time
- Local Tanzanian partner with good market knowledge, who is currently importing medical supplies, is interested
- Another partner from Malaysia preferably, if biopark would be co-funded by Govt. of Malaysia

- Pilot manufacturing of trial batches with African genotypes of sporozoites as a niche, but of strong relevance for global vaccines
- Learn GMP for future endeavours
- US Malaria vaccine developer interested in partnership
- Investments: tbd

- CRO partnerships/commissioned work
- Information and knowledge hub Dar (Kigamboni)
- Development of other biotech patents for products (IP manager required)
- Lab services to Nat. Ref. Lab
- Biologics manufacturing services, e.g. clinical trial batches or local biological fermentation
- Health related consulting services within the thematic groups or M&E subcontracting
- Commercialization of specific synthesis and knowledge products, but not selling the data themselves

Recommendations with Regard to „Generation of Business Activities“

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
6.	Strengthening the core business (research)				
6.1	Set roles for 'business managers'	Fine tune new organisational structure and review job descriptions	Align strategy with organisational behaviour	AAA	
6.2	Develop business plans for thematic groups based on strategic sub-plans (compare with section „Strategic Achievements“ and „Research Activities“))	Prepare mid to long term projection of financial potential of the established research areas	Understand, what can be expected from the future	AAA	2013
6.3	Investment planning	Prepare short and mid term investment plans	Manage cash resources	AA	
7	Develop new business				
7.1	Business activities	<ul style="list-style-type: none"> • Develop business plans • Appoint managers • Identify implementing commercial partners • Attract investors 	Build additional income source in consistence with thematic areas	AAA	2013-2014

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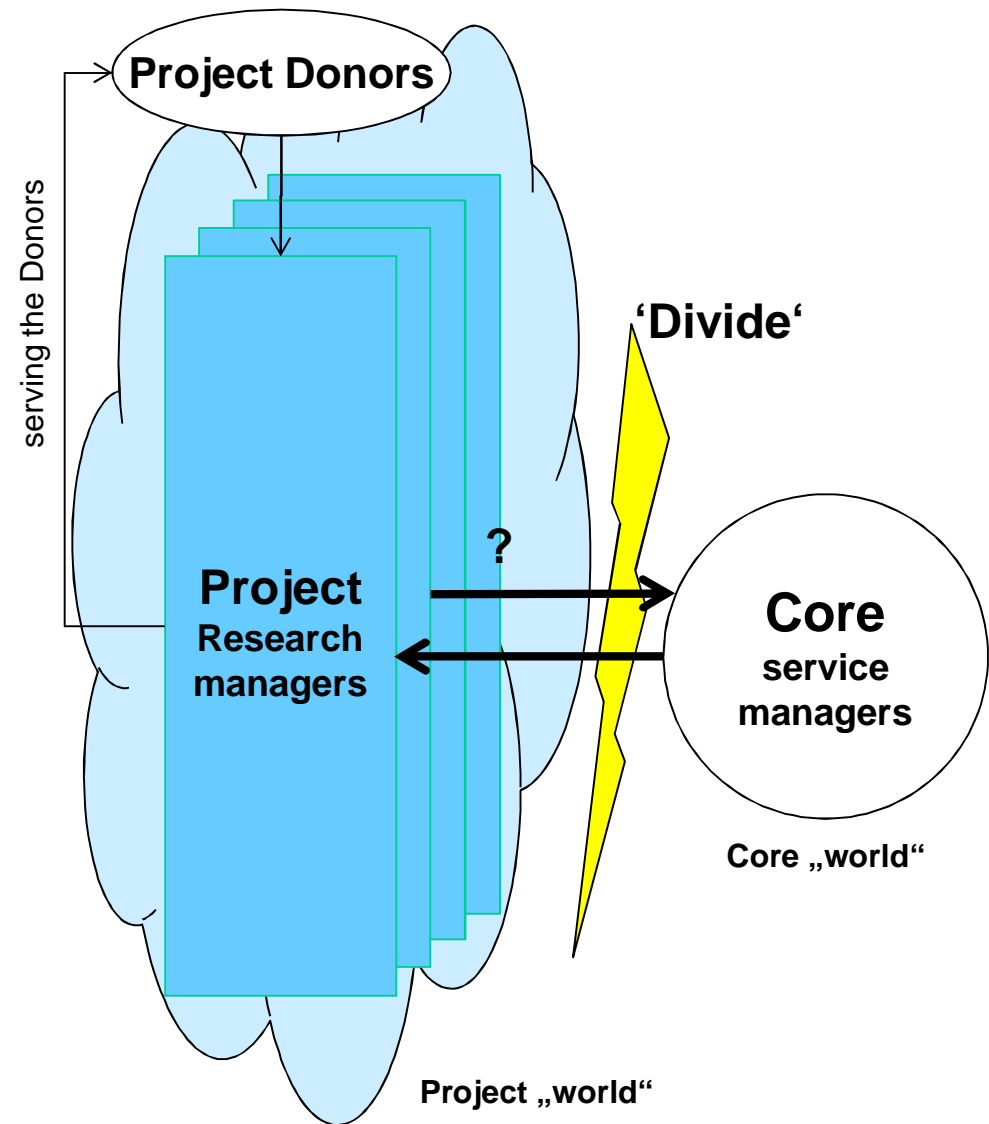
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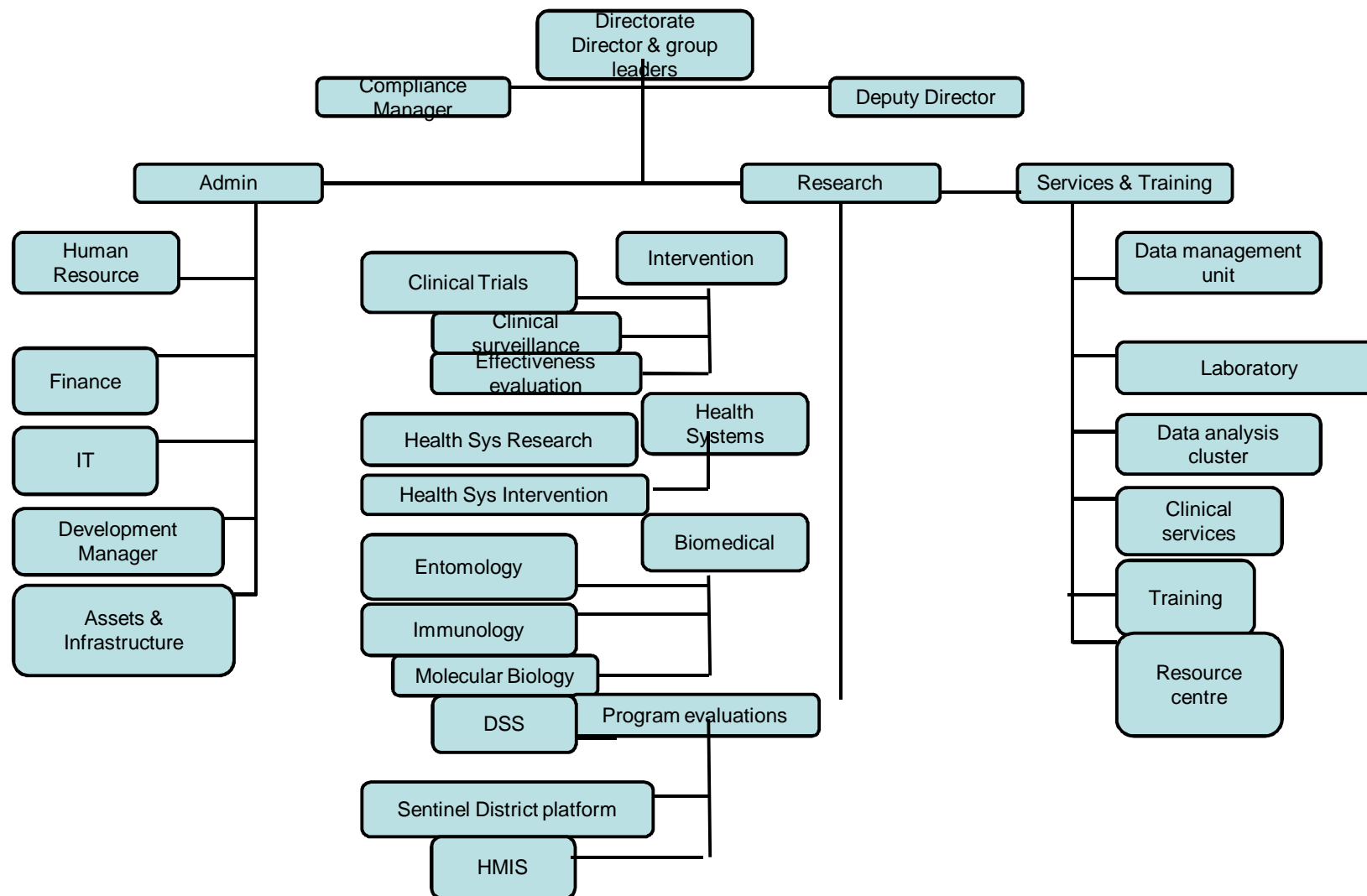
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Need to Balance the Project World and the Core World

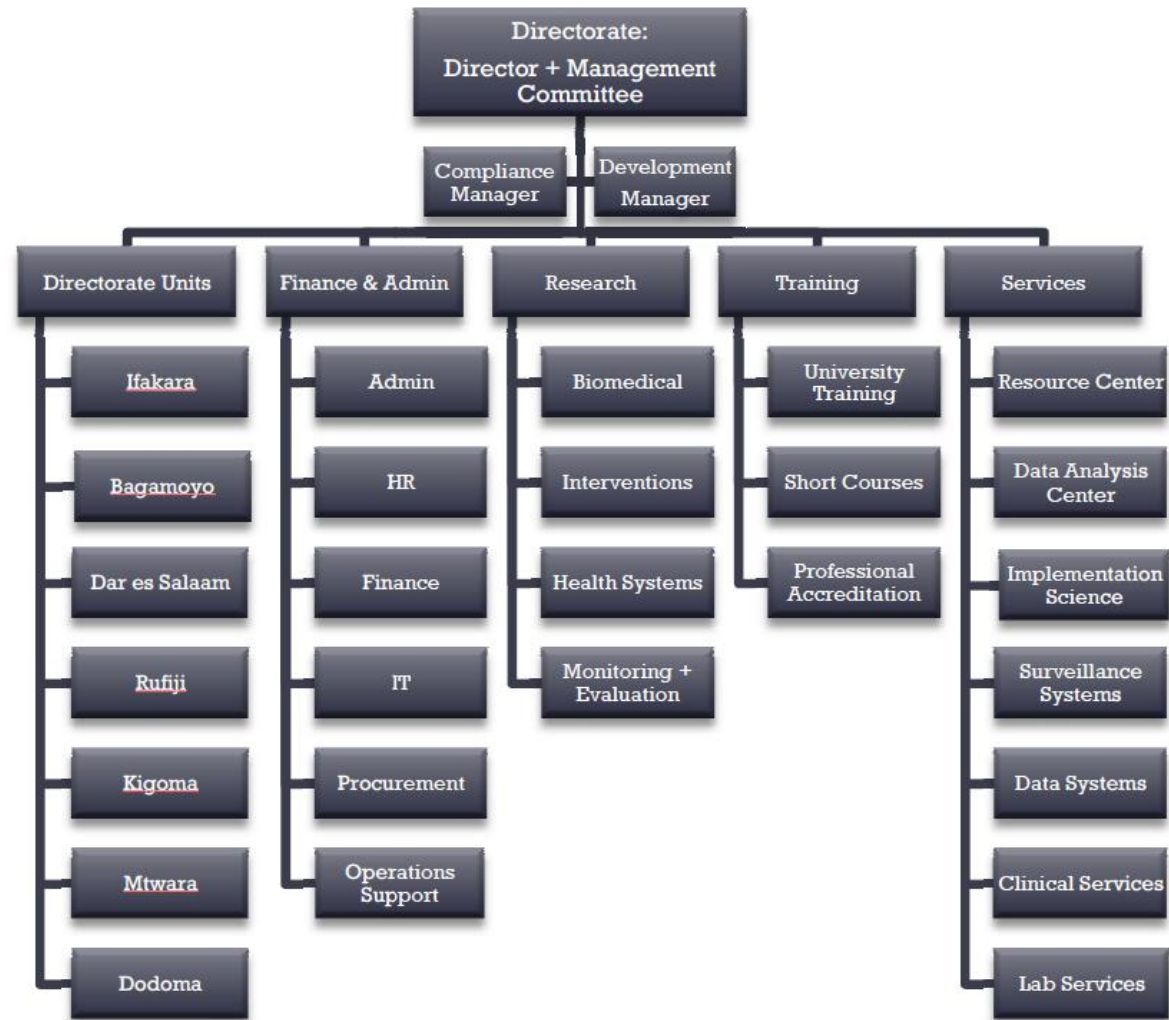
- Persistent strong growth of research volumes brought new challenges to the administration to manage growing complexity:
 - Project accounting installed
 - Regular Scientific Committee and Management Committee meetings
 - New organizational structure developed
 - Scientists to focus on science, administration to manage branches
 - 80% job descriptions due to IHI dynamics, performance measurement in progress (Finance & Admin)
- However, there is a perceptible divide between the project world and the core world (principal/agent 'wag the dog' issue), especially when it comes to financial sustainability of IHI
- Aligning the interests on both sides would help to refocus on the core business, called research



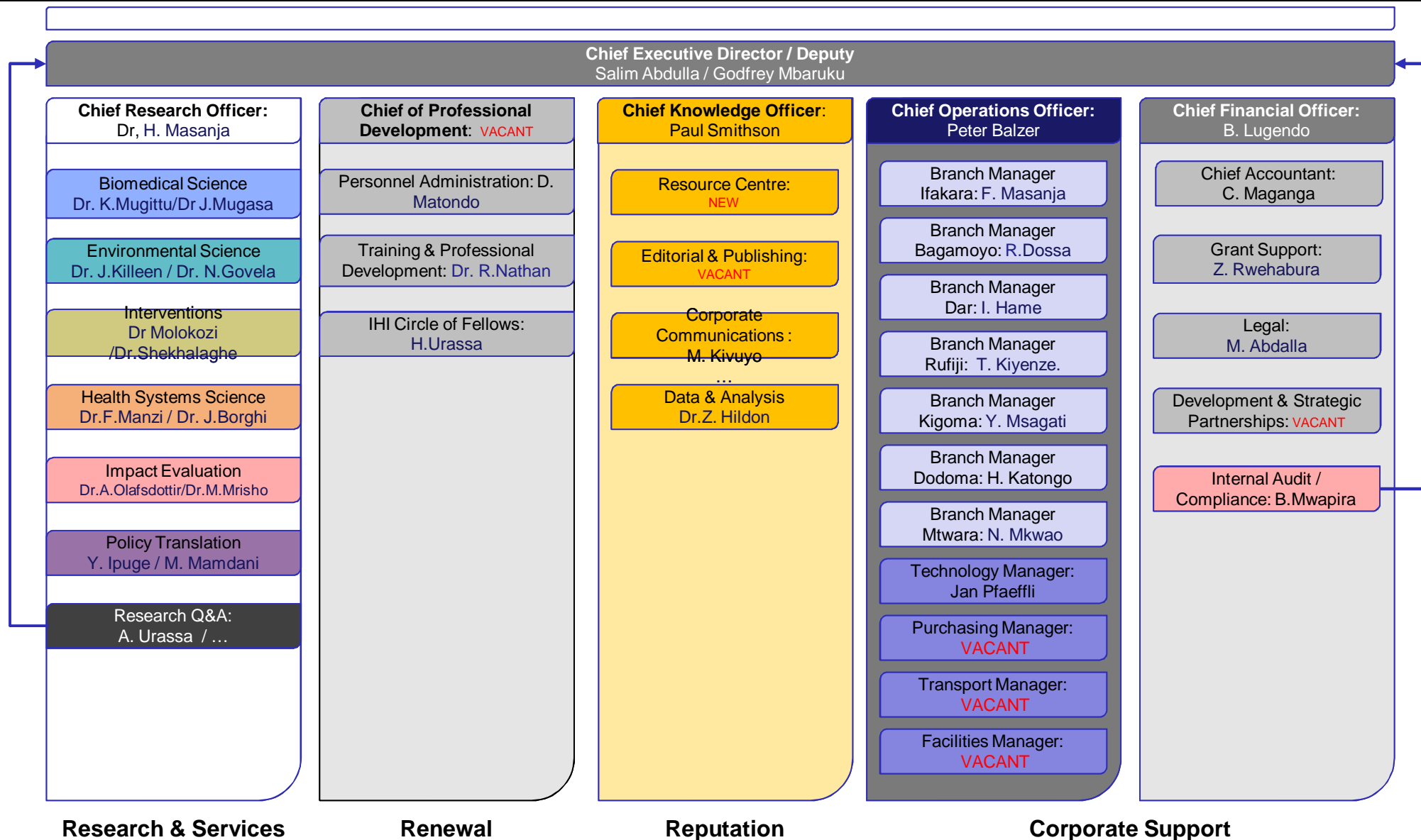
Organizational Structure as of 2008: Research in the Focus, but Regional Branches not Reflected Herein



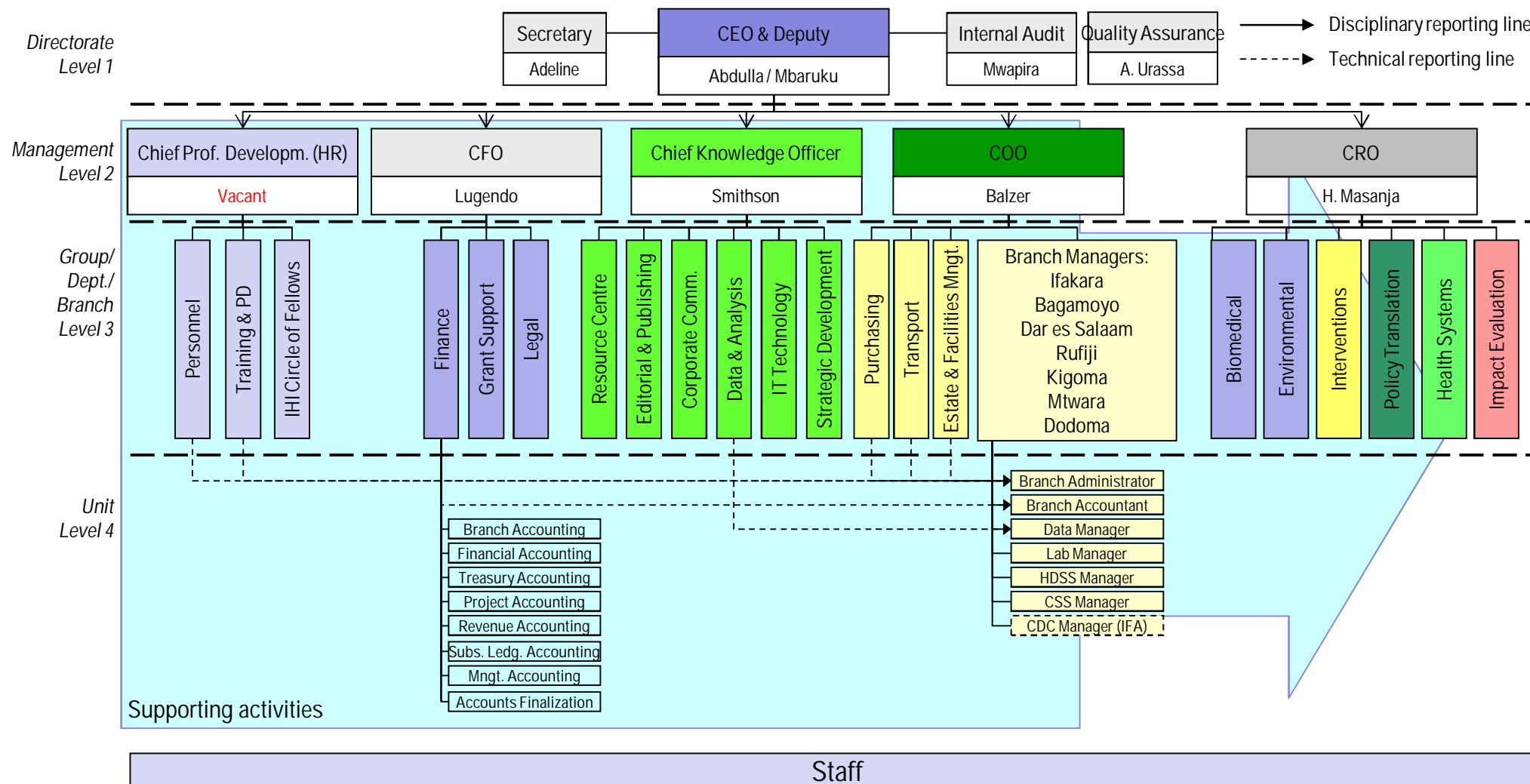
Organizational Structure as of 2010: Full Picture, but Relationship between Branches, Central Services and Research Still Unclear



New Organizational Structure with Effect from 1.7.2012 Following the Strategic Rationale - Not Fully Operational, yet, with Trial Phase until End of 2012



Organizational Structure Rearranged, Following the Relationships and Workflow (with Sub-Units; in Transition) and Counting Management Levels



- Basically, the new structure follows IHI's knowledge development and delivery model
- It provides a good distinction between the core research activities, now called „business units“ , and the supporting services that feed into them from different departments and locations
- However, IHI will need some time to fit into this matrix structure
- Current stage of implementation:
 - HR and some other departments not involved in the design of the new organizational structure
 - Not presented to the entire staff, yet (only scientific and administrative)
 - Presentation to branches during retreat in Jan 2013, thereafter in March 2013
 - Vacant positions not filled, yet
 - New organizational group „Data & Analysis“ established to strengthen the translation of data into research and policy formulation
 - Internal Audit and Quality Assurance should stay under the direct control of the MD without double reporting lines
 - Succession planning is treated as a top priority

1. Request from research projects:

- Define profile
- Advertise internally, then externally (depending on position), but not so much internationally on website, newspapers (East Africa), notes boards at branches, emails, intranet
- Interviews in collaboration between HR and technical department

2. Unsolicited applications:

- Interviews, if applicable

3. Short term contracts:

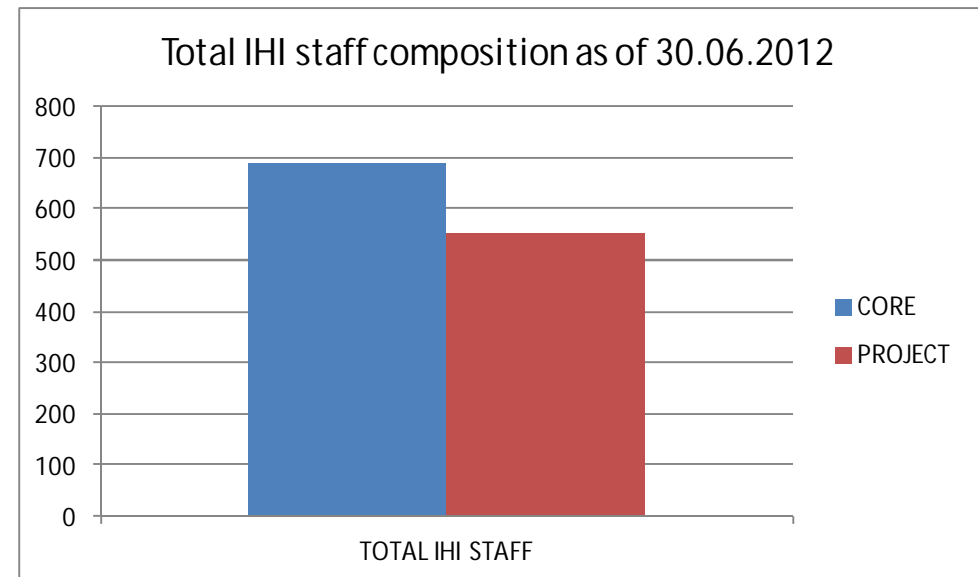
- Rather for lower cadres
- Usually recruited internally or via personal and local networks
- May include a training and a testing after training

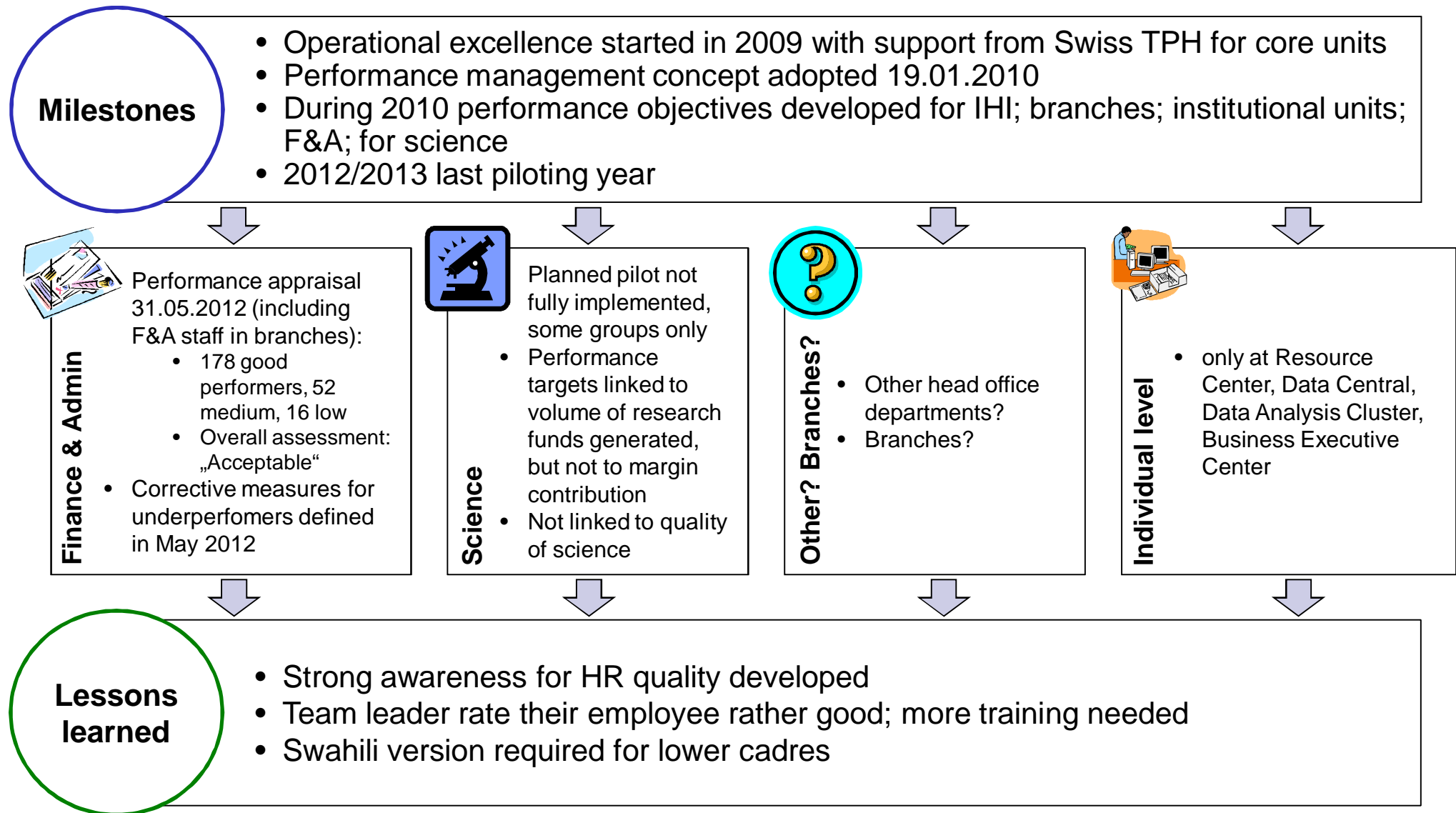
4. Internships / college field attachment:

- Upon request, if applicable

- HR marketing re-started at universities

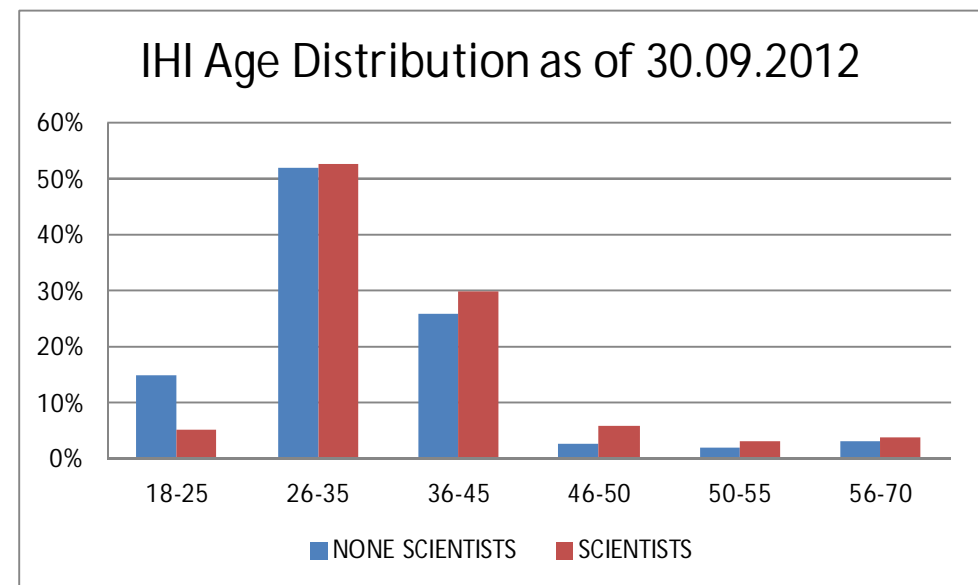
- As per 30.06.2012:
 - 35% in projects (but changing as per research volumes)
 - 65% in core
- HR administration currently in MS Excel; will be migrated into a professional system but not a SunSystem module
- Job descriptions to be fully implemented, but need to keep pace with dynamic IHI environment
- Shortage of middle level and senior scientists in certain themes, especially in the fields of research management, public health, clinic, data analysis and technical report writing
- Shortage also of experienced HR and administrative officers





- New (young) branch leaders are from administrative staff, not scientists anymore
- Scientists will focus on science
- Succession planning with general rules and capacity building workshops in place in F&A
- No specific youth retention scheme
- Additional internal training provided in F&A
- Additional training provided, e.g. for data training or for short courses
- Total training expenditures (without internal F&A training): 164m TZS 2011/2012

⇒ Hence, IHI should implement a structured career planning process, reviewed annually



Recommendations with regard to „Organizational Assessment“

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
8.	Organizational Structure				
8.1	Realign project world and core world	Tbd.	Strengthen IHI's position and align interests between research and core	AAA	2013
8.2	Operational Excellence Programme (OpEx)	Accomplish OpEx goals	Improved effectiveness and increased efficiency		
9.	HR management				
9.1	Performance Appraisal Documentation	Performance objectives should be inserted into staff files to promote accountability	Create transparency	A	
9.2	Performance Appraisal Management	Full implementation on individual level	Link individual activities to strategic objectives Increased effectiveness & efficiency	AA	2014
9.3	Succession planning	Complete and implement succession planning	Ensure continuity of the institution	A	Ongoing
9.4	Youth retention and career planning	Should go along with performance appraisal	Avoid losing trained high potentials	AA	2014

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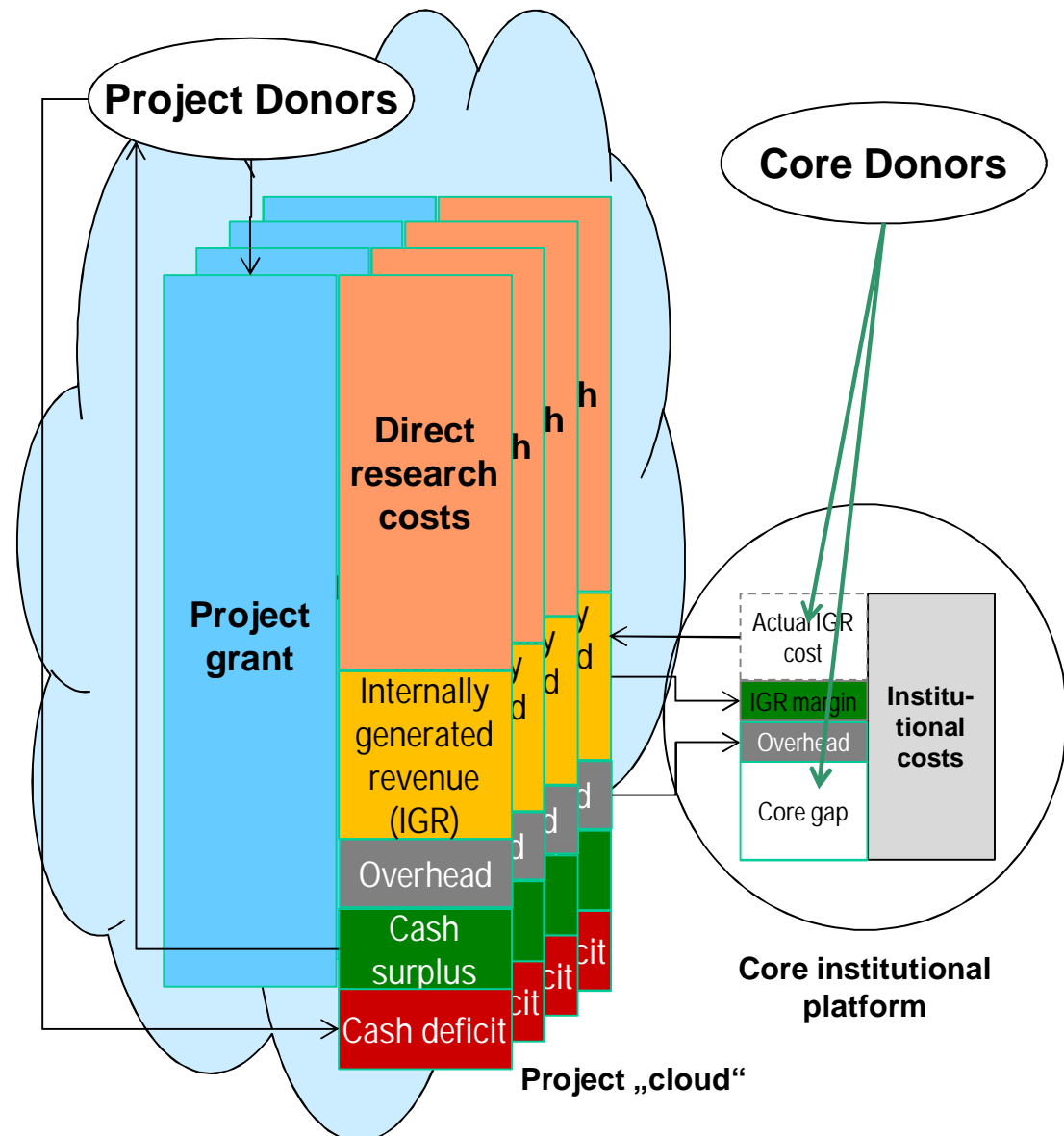
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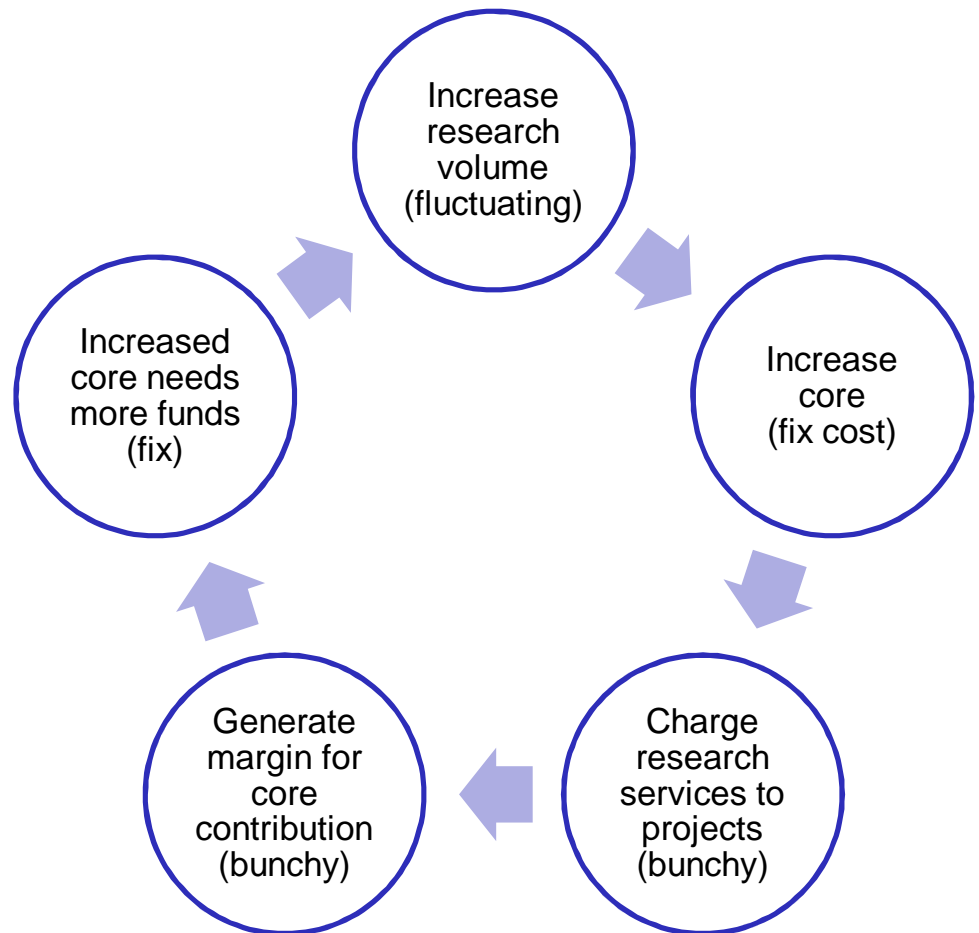
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- Project donors finance specific research projects, whereby any surplus will have to be returned
- Without any projects, the fixed core costs would be ~2bn TZS p.a.
- With a growing number and size of projects, the core expands (incl. DSS and SPD) to manage growing complexity
- Hence, overhead contribution (OVC; 2011/2012: 2.3bn TZS) from research projects is not sufficient to cover the fixed core cost
- In order to draw additional margins from the projects, IHI invoices supporting services (IGR) to the research projects
- A vicious circle begins which again increase the fixed costs and the gap to be filled



The Internally Generated Revenue (IGR) Vicious Circle

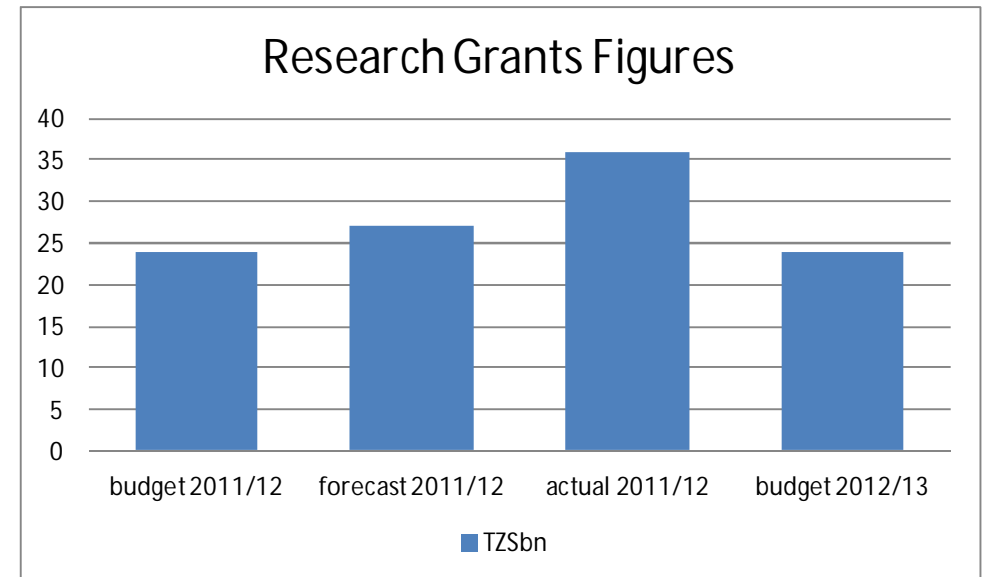
- IHI is increasing its core in order to generate more internal revenue (IGR) out of the growing research grants volume
 - IGR from transport services 2011/2012 second highest income for IHI after core donor support
- This leads to increased fix costs and the need to attract more fluctuating research grants
- So, IHI tries to cover fixed costs from fluctuating income, hence increasing the systematic risk of the institution



- IHI is aware that it has to work on both levels to escape from this vicious circle:
 - Conduct Break-even analysis: How much cash inflow does IHI need to persist?
- 1. Option:
Fill the gap with „Sell! Sell! Sell!“ :
 - 1. more research projects with adequate OVC of 15% (according to IGR price list) instead of 6%
 - 2. Fundraising programme
- 2. Option:
Reduce the fixed costs: downsizing project prepared internally for F&A

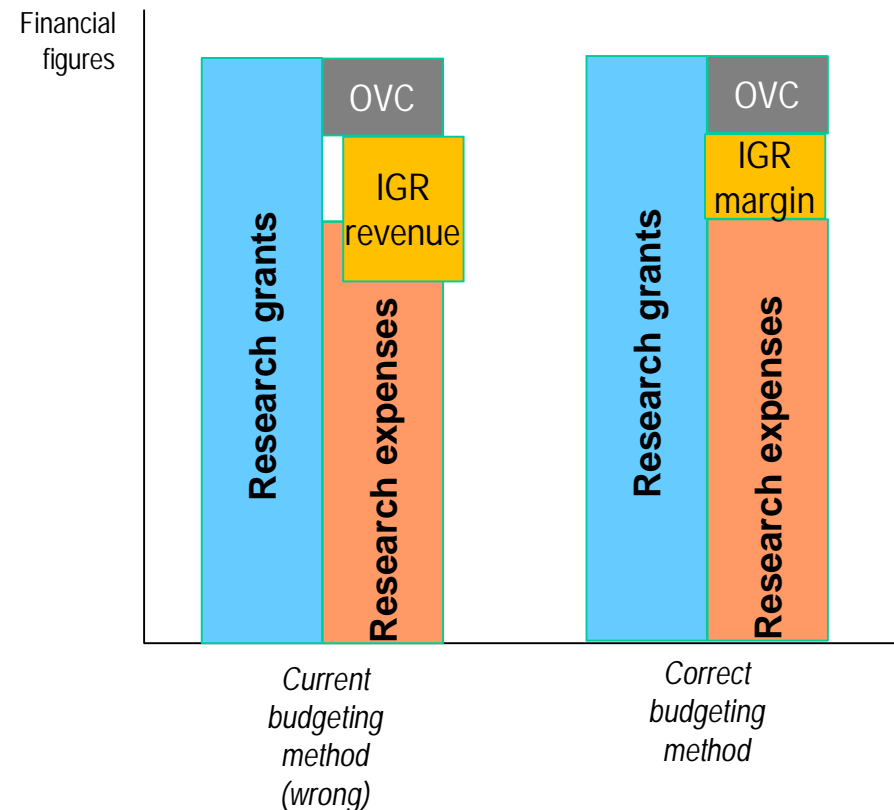
- Established 2010 to track financial performance of research projects
- Accounting method:
 - Cash flow based I&E account for each project, balanced end of year for accrued balance sheet
 - From the non-funded investment projects, only the sporozoite project is accounted for
 - Not showing the margin contribution for IHI, but only the cash balance to the donor
- Resources:
 - 9 project accountants, understanding of the scientific scope of the projects should be improved
 - MS Excel, not integrated into SunSystem
 - Unprotected Excel spreadsheets: a potential source for mistakes
- Complexity & Workload:
 - Checking and following up every single payment, depending on the level of transparency the donors want to see
 - Pricing list of project charges has some potential to be streamlined
 - Overhead contribution should be 15% according to price list!
- Transparency:
 - In case of overspending, both project leaders and donors will be informed
 - Not showing the IGR and margin generated by a single research project
 - Is unclear, how much OHC and margin from IGR contribute together to the core

- In general, the budgeting documentation focuses on core bottom up, not on research
- In the documentation, no breakdown of the total research grants budget 2012/2013 of TZS 24bn
- Research grants budget based on research cost reported at the moment of budgeting - review started in October 2012
- Project budgets are sometimes not comprehensible to the financial department
- IHI aware that it has to improve its projection skills
- Underlying approach should be: „What can we achieve strategically in the different thematic (business) groups?“



Financial Performance and Systems: Budgeting Research Related Figures

- In the 2012/2013 budget, there is a figure for research expenses of TZS 16,604,977,511
- This figure was calculated by deducting OVC and total IGR from the budgeted research grant income
- However, it is just the IGR margin which would have to be deducted, as $\text{IGR revenue} = \text{IGR costs} + \text{margin}$
- The margin could be set based on average figures from the past
- This case again shows that IHI still doesn't have full transparency over the cost structure (working on it)



- Large investments require special attention, as they cause a large cash consumption
- IHI is already tracking financials of investment projects, incl. forecast
- Specific procedures for large investments will be developed:
 - Thresholds
 - Definition of categories (strategic, non-strategic, expansion, renewal etc.)
 - Required documentation
 - Decision making process
 - Implementation follow-up
- Change initiated:
Pipeline of construction projects under preparation, that will be taken to Construction Committee and finally to Management Committee



Fig.: Design of Kingani training centre (IHI/Peter Sasse)

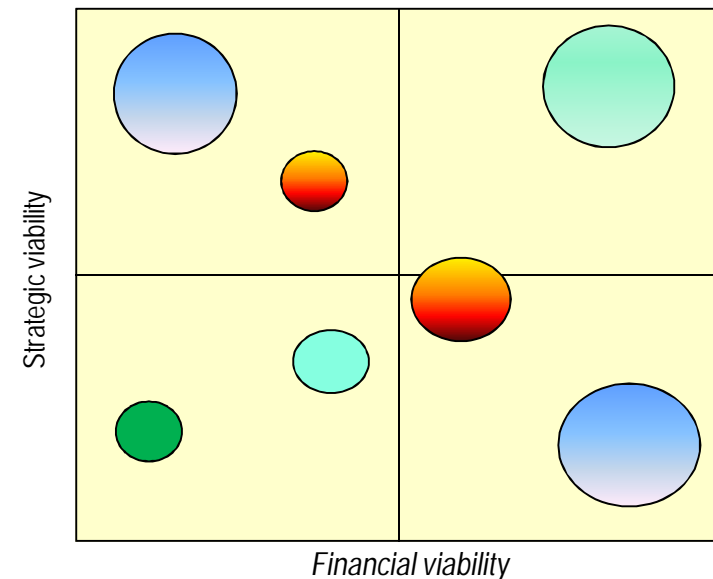
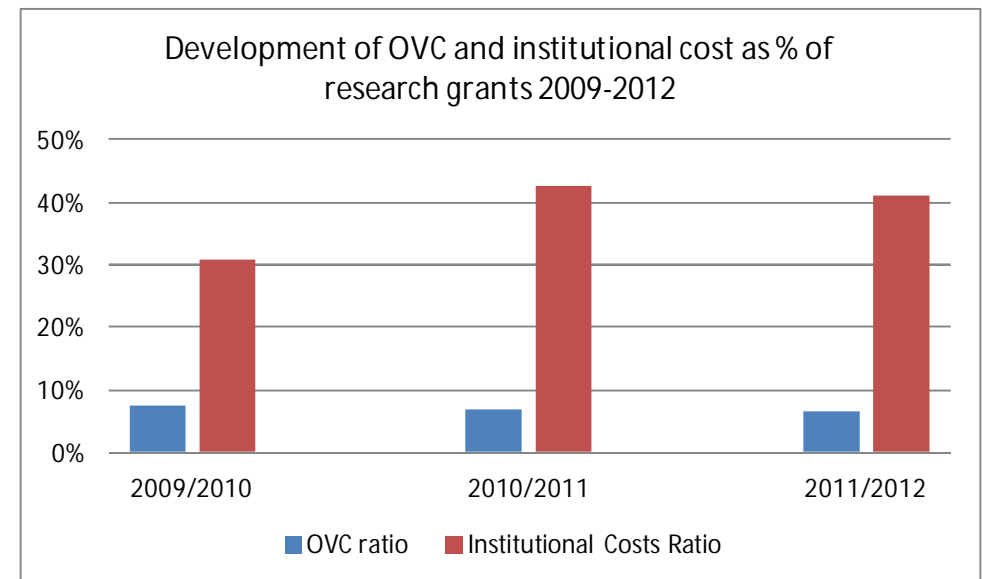


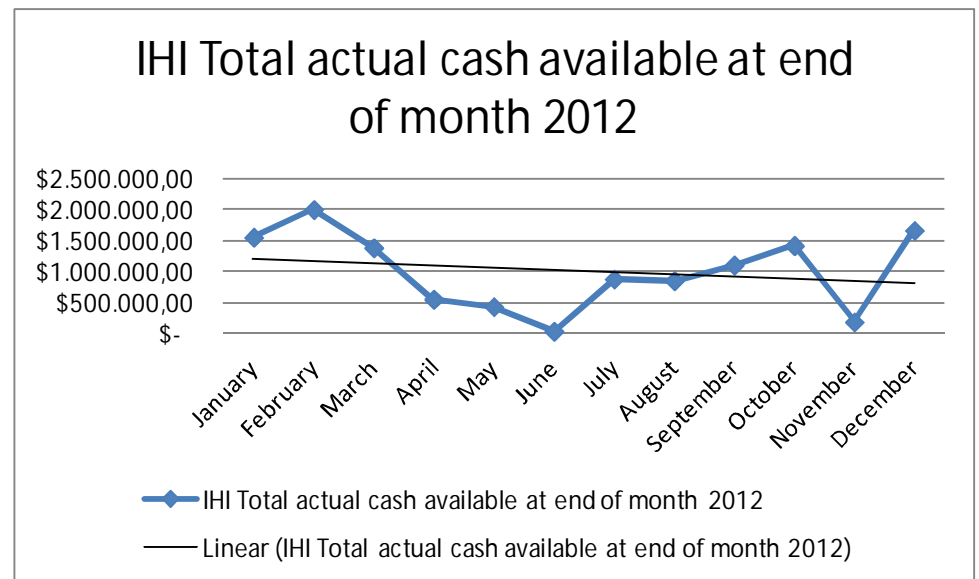
Fig.: Investment portfolio (sample)

- Strong improvement since 2009
- All financial project reports produced in time
- Institutional expenditures have increased to more than 40% of total income (2011/2012: 41%) whereas Overhead contributions in % of research grants have been constantly declining throughout the last years (2009/2010: 8%; 2011/2012: 6%)
- Financial reports currently changed, comprising previous year figures, budgeted figures and forecasted figures in order to better understand the actual development
- Brand New: Cost centre analysis with margins per cost centre just under preparation



Note: in 2010/2011, data resource center, FBIS, DSS, CDC clinic Ifakara, and core scientists were regrouped under institutional costs (core)

- Cash trend line is still decreasing
- Institutional monthly cash flow projection implemented by June 30, 2012, but not linked technically to accounts
- Monthly or quarterly cash flow projections on project level under preparation
- Cash management and treasury management cannot properly work without grants and margins forecast on the project level
- Need for more financial flexibility of IHI
- Need to find new funding solutions for platforms (DSS, SPD)



- 2010/2011 clean audit report, but:
 - 'Project overhead contributions' and 'Internally generated income' (IGR) are already included in 'Research grant income', so counted twice in the income sum
 - 'Research activities' are actually income and don't reflect the true costs from IHI's perspective
 - IHI aware that it needs to generate two separate I&E statements both for the consolidated and for the core level
- 100% of 25 auditor's observations 2007/2008 implemented in 2010
- 31 of 33 observations from 2008/2009 implemented to date
- 20 of 22 observations from 2009/2010 implemented
 - Pending „Long outstanding receivables balance from project debtors“ and „Lack of accounts receivables ageing analysis“
- Clean audit report for 2011/2012 expected

IFAKARA HEALTH INSTITUTE SPECIAL PURPOSE FINANCIAL STATEMENTS				
STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 JUNE 2011				
	Note	2011 Tzs '000	2010 Tzs '000	
Income				
Research grant income	3	29,648,292	22,609,901	
Program partners support	4	6,091,011	2,897,268	
Government of Tanzania	5	70,000	100,000	
Income from other founder members and partners	6	182,193	-	
Dedicated research infrastructure support		82,058	-	
Project overhead contributions		2,065,779	1,698,692	
Internally generated income		5,154,659	3,010,147	
Interest income		1,088	1,350	
Gain on foreign exchange		158,045	659,661	
		<u>43,453,125</u>	<u>30,977,019</u>	
Expenditure				
Research activities		29,648,292	22,609,901	
Personnel costs		4,842,136	2,537,762	
Other operating expenses	7	7,796,876	4,411,825	
		<u>42,287,304</u>	<u>29,559,488</u>	
Total comprehensive income for the year		<u>1,165,821</u>	<u>1,417,531</u>	

Source: PwC Audit Report 2011

- Performance appraisal „Quality Barometer“ for F&A reached level 6 out of 10, which is „Acceptable“
- Since 2009, the finance/accounting department has been completely reorganized into sub-units with own responsibility parallel to the introduction of the new SunSystem accounting software
- Project accounting unit stands separate to the statutory financial system
 - Responsibility: cash-oriented income/expenditure overview on excel basis, often the „real source“ for reconciliation with financial accounts
 - Spreadsheet-based, parallel bookkeeping system with no automated link to statutory accounts
 - Needed for external performance reviews (audits) by donors/project contributors
 - The finance department should integrate statutory and project accounting under the existing bookkeeping system to generate accurate financial information, including cash flow-based data
- Although the current organization collects large amounts of data, it lacks efficiency regarding processing relevant business intelligence
 - Reduce the overflow of information and forms (chain of signatures needed)
 - Evaluate replacement of paper-based documents with electronical workflow and storage
 - Improve quality of cash flow-based and forward looking information
 - Aggregate financial information aggregation to relevant management data and provide meaningful tool for managers
 - > Regular management reports (daily, monthly, quarterly)
 - Implement profit center-accounting for various projects and activities

- SunSystem implementation started in 2009 with general ,Ledger Accounting Module'
- Currently six users
- Software support from Microsoft Software Applications Uganda Limited, Kampala, working better than with Dar IT support company
- Creditors module under implementation
- Asset register module under implementation into SunSystem instead of managing them in a separate Excel sheet
- Next: procurement module
- Add inventory module in 2 years time
- Payroll system will be renewed
- What could be improved:
 - Without a proper ICT platform, a comprehensive and functionally integrated accounting system will not work
 - Implement Project Accounting and Revenue Management into SunSystem (incl. Debtors accounts), enhancing the dunning process
 - Implement SunSystems Enterprise Performance Management controlling & reporting module
 - New organisational structure needs to be reflected in the cost centres

Recommendations with Regard to „Financials“

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
10.	Financial Management				
10.1	Project accounting	Project accounts should be integrated into SunSystem instead of managing them in a separate Excel sheet	Efficiency, reliability, transparency	AA	
10.2	Build project controlling	Capacity building of project accountants to better understand scientific scope of projects, or include into project meetings	Institutional sustainability	AAA	
10.3	Ensure Institutional development	Provide earmarked core grants for 2-4 more years for institutional development	Continue promising pathway started in 2009	AAA	
11.	Budgeting				
11.1	Improve budgeting procedures	Include research grants project and thematic group wise, include investments with a more strategic approach	Budgeting quality and reliability	A	
12.	Management Accounting & Reporting				
12.1	Integrated accounting system	Add missing modules	Data accuracy, efficiency, transparency	AA	

Recommendations with Regard to „Financials“ (cntd.)

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
13.	Cash Management	Introduce project casj forecasts and link with treasury	Proper management of liquidity	AAA	
14.	Annual Accounts and Auditing	Change structure of annual accounts and prepare two separate I&E statements with and without research grants	Clear and transparent information	AAA	Quick and simple
15.	Financial Organisation	Simplify procedures and reduce paperwork without compromising controls	Reduction of administrative costs	B	
16.	Controlling	Hire Financial Controller or develop project accounts head to fill this position & install Sunsystems ,Enterprise Performance Management' controlling module	Ensure institutional sustainability	AAA	
17.	Financial Sustainability				
17.1	Find new funding solutions for platforms and 'core' (DSS, SPD)	Look for donors	Improve financial position if IHI	AAA	
17.2	Consider soft loan bridge financing and working capital mechanisms	Financing mechanism tbd with core donors or with other financial partners	Improve financial flexibility of IHI	AAA	

Recommendations with Regard to „Financials“ (cntd.)

No.	Description	Activities proposed	Purpose	Priority (A,B,C)	Deadline
18.	ICT and accounting system				
18.1	Build fully functional ICT platform as a basis for proper accounting system	Implement findings from July 2012 assessment report		AAA	30.06.2013
18.2	Additional accounting & reporting SunSystem modules	To be implemented as per roadmap suggested	Efficiency and accurate data for proper management reporting, not just for auditing purposes	AAA	ongoing

1. Overview and Approach
2. Review 2008-2013
3. Prepare for 2013-2018

Board Proposal

- Report on key findings
- Acknowledge major requirements
- Provide most important recommendations

Financial sustainability

- Build on existing competences and opportunities
- Consider partnerships, joint ventures, vertical integration

Scenarios/ Options

- Build strategic options from major findings
- Feed into strategic planning

- A condensed version of this report was provided during the BoT meeting on February 4, 2013

Board Proposal

- Report on key findings
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Financial sustainability

- Build on existing competences and opportunities
- Consider partnerships, joint ventures, vertical integration

Scenarios/ Options

- Build strategic options from major findings
- Feed into strategic planning

- Ensure financial support from current core funders:
 - Obtain a clear statement for core donor support beyond 2013
 - In particular, capitalize on the commitments from the Swiss founder members and their constitutional status to support non-research, non exposure creating, administrative and institutional development
 - Determine financial gap from leaving donors (Norway)
- Develop existing research activities:
 - Improve and maintain quality standards (HR development issue)
 - Improve current project pricing
 - Ensure that IHI receives the full Overhead Contribution (OVC) it is entitled to (min. 10% instead of 6%)
 - Attract research projects that pay for SPD & DSS platforms
 - Continue focusing on larger research projects
- Improve cost structure (already started):
 - Conduct break even analysis with current cost structure to determine financial gap
 - Identify and implement cost savings

- Build financial model for strategic plan to understand the costs and benefits
- Chapter 501 (c) registration in the U.S.:
 - U.S. lawyer needed
- Fundraising:
 - Develop and implement a fundraising strategy
 - Attract new donors to the Programme Partners Committee without diluting the status of the current ones or even losing them
 - Implement mechanisms to strengthen financial flexibility, i.e. bridge financing solutions in case of financial bottlenecks
- Develop new research based business opportunities as a new sustainable income source:
 1. For instance, Rapid Malaria Diagnostic Kit
 2. For instance, Medical devices and supplies
 3. For instance, Sporozoite research batches
 - From blueprint to scale: develop detailed business cases for each potential business opportunity, including blueprint/pilot, market potential, supply chain and investments needed
 - Identify other innovations and research outcomes from IHI knowledge base with a commercial potential
 - Position as a partner for pharma or CRO industry (in key therapeutic areas)

- Clearly define the roles for thematic group leaders as 'business managers'
- Strengthen both their scientific and management skills
- Raise awareness and train/educate scientists in responsible organisational behaviour
- Implement appropriate incentive mechanisms (bonus on generated margins), especially to realign scientists and administrative staff
- Define youth retention system and career paths
- Fully implement integrated appraisal systems, also considering research quality standards
- Retain talents with competitive packages and salaries

- Build on Swiss TPH funded OpEx achievements: Continue implementation and roll out of Operational Excellence programme (OpEx) which intends to avoid double work and reduce administrative complexity
- Identify areas of cost reduction and determine downsizing potential
- Introduce strategic business development, sales & marketing
 - Support innovation and research development activities
 - Build strategic partnership management, both on corporate and business unit level
- Introduce strategic controlling
- Implement thematic group platforms, e.g. research design, controlling & reporting, writing
- Establish fundraising unit

- Basic IT platform:
 - Fully implement a functional IT platform as the basis for a proper accounting & reporting system
- Research and project accounting:
 - Develop thematic groups business plans with realistic financial targets
 - Transform project accounting unit into project controlling unit as sparring partners of scientists
 - Prepare monthly project cash forecasts regularly and link it with treasury
- Investment projects:
 - Define and implement professional investment selection and monitoring procedures, incl. Governance procedures like thresholds for Board decisions
- Accounting and bookkeeping
 - Add missing SunSystem accounting modules, especially project accounts to have full project transparency and financial control over projects
- Management information systems
 - Define set of most important measures to report on a regular basis on ED level, departmental level etc.
 - Implement them with SunSystem Enterprise Performance Management module

Board Proposal

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Scenarios/ Options

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Strategic Options: The Fundamental Challenge Will Be to Manage Further Growth with a Strengthened Institution

1. Focus on publishing champions

- not very sustainable in financial terms
- Risk of being 'science first' driven

Unilateral approach

2. Focus on bread winners

- risk of losing current scientific portfolio
- Risk of being 'finance first' driven

Unilateral approach

3. Align project volumes, margins and scientific exposure

- Huge resources required
- Management of a complex organisational structure

Growth approach

4. Streamline thematic groups & core

- Knowledge about 'market potential' of different thematic groups both in scientific and financial terms required
- Adjust core administration to affordable level

Consolidation approach

- Research:
 - Define the dimensions of „growth“, e.g. larger research projects
 - Review project management with regard to approval, monitoring & controlling, and final evaluation (avoid lossmakers)
 - Reposition IHI as agenda setting institution by refocusing and exploring the global strategic opportunities, and by broadening its research donor base
 - Rollout of scientific performance appraisal, fix research quality disparities and run IHI quality assurance programme
 - Generate revenues for investments:
 - Accreditation of Ifakara and Bagamoyo labs for national reference
 - Attraction of more clinical trials to Kingani trial clinic
 - Attraction of programmes or donors for SPD, DSS and CSS platforms
- Supporting services:
 - Unlock inefficiencies in supporting services functions
 - Identify and implement cost savings
 - Take make-or-buy decisions
 - Revisit pricing

- New logical framework was built by IHI based in strategic plan 2013-2018 and our findings
- Overall Goal:
 - Improved health outcomes in Tanzania
- Outcomes:
 - Research Influence: IHI research and evidence makes material contribution to advances in public health in Tanzania and globally
 - Output 1: Increased quality, quantity, relevance of IHI research; full utilisation of research platforms and establishment of CRO
 - Output 2: IHI produces high quality data and knowledge products, accessed by a broad range of users
 - Institutional Development: IHI has increased its organisational effectiveness, efficiency and long-term sustainability
 - Output 3: Operations
 - Output 4: Renewal (Human Resources)
 - Output 5: Governance
 - Output 6: Sustainability
- Various indicators were assigned to the Overall Goal, the Outcomes and the Outputs
- **Note:** Despite our concerns and recommendations, a specific Output or Indicator with regard to aligning research and institutional development and ensure that researchers contribute financially from their projects to the sustainability of the institution was not taken into consideration
- At the time of issuing this report, costing is prepared by IHI

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