

# STRATEGY TO INCREASE THE PRODUCTION OF QUALITY AND RELEVANT RESEARCH AT THE UNIVERSITY OF RWANDA

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#### 1. BACKGROUND

The vision of the University of Rwanda (UR) is to be a research led university with national, regional and global impact. The objective of UR Management is to bring the University to be among the top 10 ranked Universities in East Africa by 2020. Fortunately, the law establishing UR, the UR Vision and Mission all lay a good foundation for UR to pursue its objectives.

Although the current research base is very low, UR management recognizes that there is a huge potential for the University to achieve its objective of being a research led University in a reasonably short period and indeed be among the best ranked Universities in Africa and the world. UR is putting in place a series of enabling frameworks to ensure a critical mass of researchers in terms of staff with PhD qualification, enrolment of doctoral and masters' research degree students, development of staff skills in conducting research as well as attracting grants for research, and to ensure staff and students are conducting research and are publishing research findings with impact.

A notable recent initiative is the approval of the UR Academic Workload Framework. This Framework allocates time for research based on the staff academic level, and it ranges from 25% to 50% as follows:

- 1. Associate Professor and Full professor are required to spend 50% of their time on research
- 2. Lecturers an Senior, Lecturers and module leaders are required to spend 40% on research
- 3. Assistant lecturers and Programme leaders are required to spend 35% on research
- 4. Heads of departments, Deputy Deans of School, and College Directors (e.g. Research and Postgraduate Studies; and Academic Quality Assurance,) are required to spend 30% on research; and
- 5. Deans of Schools are expected to spend 25% on research.

Another recently approved policy instrument is the Framework and Regulations for Research Higher Degrees to guarantee quality higher degrees provision. The framework includes a mechanism that ensures production of publications from theses.

Great effort is needed and radical measures taken to inculcate a research culture at UR, to create an enabling environment within UR for growth in research productivity and dissemination, and to provide resources and facilities for UR staff and students to produce research, innovation and engage in Technology Transfer activities. Required are policies, and policy instruments (procedures, guidelines and their implementation strategies) aimed at moving UR towards the desired levels of a research led University. To be a research led University, UR must ensure that:

- a) it institutes a "research-culture":
- b) its staff is "research active" and publishing in leading and high impact journals;
- c) it develops postgraduate research and publication

- d) its teaching and learning is informed by research; and
- e) its research contributes to the Country's socio economic development

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This paper from UR Research and Postgraduate Committee proposes a strategy to increase the production of quality and relevant research, graduates of research degrees and dissemination of research findings.

#### 2. SITUATIONAL ANALYSIS

Based on various analyses and initiatives, including the 17 – 18 July 2014 workshop of the UR- Research and Postgraduate Studies Committee, the low level of research production at UR is characterised by (but not limited to) the following:

- a) Limited number of lecturers holding Doctorate degrees, currently UR has only 19% PhD holders among its staff. In absolute numbers, this is 283 out of 1481 academic staff
- b) Academically qualified staff are mostly engaged in teaching and administrative work, although the staff student ratio of 1:19.5 is favourable. However, staff with the requisite qualifications to supervise and hold leadership positions (Senior lecturer and above) are only 12.5%, which in absolute numbers is 185 out of 1481. Also 28.5% are Tutorial Assistants, meaning that 423 out of 1481 cannot do teaching rather they only support the lecturers and yet are on the payroll.
- c) Currently, about 19% of the staff are research active and the average per capita research output is 0.08 papers per year, compared to the IUCEA per capita norm of one paper per year.
- d) Engaging is research and supervision of postgraduate degrees is considered optional rather than mandatory
- e) Lack of incentives to do research and supervise postgraduate degrees theses. Very limited number of Master's and Doctoral students; currently the proportion of Postgraduate students is only about 2%. In fact this proportion includes postgraduate certificate and postgraduate diploma students, meaning that the proportion of those doing masters and PhD is even lower than 2%.
- f) Unclear coordination of research structures and the relegated recognition of managers of Research and Postgraduate Studies.
- g) It is noted further that although the legal framework for research conduction at UR is provided for, there exists some conditions of service that discourage staff from undertaking research. For example lack of sabbatical leave for staff to join active international research institutions for the purpose of conducting research and and publishing.

To institute a research culture, UR has to:

- a) Inculcate academic spirit in its community (staff, students and academic units). This entails, members of UR community (individuals and university units) to conduct research that is driven by curiosity, undertake initiatives to seek research opportunities, engage in Innovations and present their findings to different forums for critique by peers.
- b) Have a vision that promotes research culture. This includes creating ownership of collectively determined programmes among members of academic units, research projects and associated research teams and undertaking periodical review of research activities e.g. through retreats.

- c) Invest in people to ensure there is a critical mass of researchers spread across career stages from PhD students to full professors and promote mentorship of each other without arbitrary hierarchy where the senior experienced researchers mentor the junior while the junior researchers mentor the senior on new technologies such as ICT related advancements.
- d) Put in place structures and systems that promote and support an environment conducive to research.
- e) Ensure availability of finances for carrying out research through Core funding, Project grants (e.g. university, research councils, foundations, Collaborations and NGO), Own grant awards (e.g. setting up a University research fund) and consultancies
- f) Ensure internalisation in research conduction, co-publishing, and postgraduate students
- g) Capacitate staff to write successful research grants proposals
- h) Make research productivity integral to the performance management system.

To promote research activeness of staff, students and academic units and publication of research in leading journals, UR has to:

- a) Promote research discussion by ensuring academic units run regular seminar series, special (public) lectures, organise workshops and conferences and invite visiting academics to give seminars or research related talks (and benefit from them).
- b) Facilitate and recognize in house publication: working paper series, own journal, book series and annual research reports
- c) Ensure external publication of researches conducted by UR staff and students as credible international journal articles, books, book chapters and policy reports and ensure the visibility of these publications by academia/ peers, postgraduate students, policy makers and practitioners.
- d) Target to create impact within the academia (citations, referee activities, advisory and editorial boards) and beyond the academia (relations seminars, etc. with practitioners)
- e) Introduce an incentive scheme that rewards and encourages staff to engage actively in research and supervision of research students besides teaching and other services.
- f) Increase staff and institutional visibility through the use of the institutional electronic repository and system of Researcher ID.

To develop postgraduate research and publications with teaching and learning informed by research, UR has to:

- a) Increase the critical mass of staff with PhD qualification and train them to supervise higher degrees research students.
- b) Increase the number of research students, and introduce scholarships for higher degrees students and post doctoral fellowships,
- c) Have in place policy instruments on publications from students' theses and policy instruments for affiliation on publication by UR staff and students,
- d) Have in place a Higher Degrees Policy to guarantee the smooth running of a large number of students registered in Research Higher Degrees.

To ensure UR research contributes to Rwanda development and the well being of the Rwandan society, the UR has to:

a) Establish research units, research centres and research institutes. These will serve as a focus of scholarly activity and intellectual creativity related to teaching, research and service; provide undergraduate, postgraduate and postdoctoral students with additional research opportunities; establish a strong positive impact on the economic

- development of the country; and improve the visibility and outreach of UR locally, nationally, and internationally.
- b) Implement a research communication strategy for circulation of publications (e.g. Policy Reports, Annual Research Reports and Books); visibility at external conferences and workshops, through outreach activities, exhibitions and road shows; using old media (press, radio, TV, and feature articles); and using new media (e.g. websites, Twitter, Face book, blogs, Videos, photos, branding logo, pens, and stationery).

## 3. PROJECTIONS FOR RESEARCH PRODUCTION AND POSTGRADUATE TRAINING

This Strategic Framework starts by presenting projections with targets for research and postgraduate production for the next ten years (up to 2024) where the baseline is 2014 (or 2013 for publications). These projections can be attained provided the right inputs are made and the enabling environment is put in place.

## 3.1. Projection of staff with PhD degrees

Studies (e.g. by Guillermo A. Lemarchand¹) have established that linear increase in the number of Full Time Equivalent (FTE) Researchers results in quadratic or even cubic increase in research production. By definition (based on the *Frascati* Manual) a researcher is a PhD holder and a PhD student. The Academic Workload Framework assigns a range of 50% to 25% time allocation for research. This means that UR researchers range between 0.25 FTE to 0.5 FTE. The studies also established that factors such as co-authorship and internationalisation are major contributors to increased quality of publications where impact (citations) is used as a proxy measure for quality.

In order to make projection of FTE researchers to reach a critical mass within ten years, we begin by projecting the number of UR students by assuming a 5% annual increase in the total student population. This is a linear increase. The current overall staff student ratio (SSR) is 1:19.5. This ratio is considered to be good or very good based on the standards of the Inter University Council for East Africa (IUCEA). The number of academic staff is then projected by considering the increase in the number of students while maintaining the SSR to be 1:20. This means the increase in the number of academic staff will be linear. The IUCEA standards recommend the proportion of PhD holders among the Academic staff to be at least 60%; this is the critical mass we are aiming at.

Table 1 shows the projections of staff with PhD for 2014 – 2024. The projections are based on the following assumptions:

- a) The current number of staff who are doing their PhD studies and are expected to complete their studies in the next 1, 2, 3, or 4 years
- b) All staff with masters degrees must register for PhD studies in the next three years (i.e. 2015 2017) and qualify in the next 7 or 8 years.
- c) The current staff with bachelor's degrees who must register for masters and qualify within the next 3 years and then register for PhD degrees.

## Table 1: Projection of staff with PhD degrees for 2014 - 2024

<sup>&</sup>lt;sup>1</sup> Guillermo A. Lemarchand, 2014, *The long-term dynamics of co-authorship scientific networks: Iberoamerican countries (1973–2010)*, Research Policy 41 (2012) 291–305, Elsevier

	Baseline 2014	2015	2016	2017	2018	2021	2024
Projection of Number of students assuming 5% annual enrolment increase	28,881	30,324	31,840	33,432	35,104	40,637	47,042
Projection of Number of staff to maintain the 1:20 SSR	1,492	1,516	1,592	1,672	1,755	2,032	2,352
Projection of No. of staff with PhD degrees	299	364	478	632	760	1, 302	1,646
% of PhD holders among the total	20%	24%	30%	38%	43%	64%	70%

It is anticipated that every College will develop its own staff development plan and that only masters or PhD holders will be employed. Bachelors' degree holders will be employed on contract as Tutorial Assistants on condition that they obtain a master's qualification within the contractual period.

### 3.2. Projection of number of senior staff, publications and postgraduate students

One strategy to increase the number of researches and publications is to increase the number of research higher degrees students. This requires the increase in the number of senior staff capable of supervising doctoral students and mentor early career researchers. Moreover, the few available senior staff are overwhelmed with multiple administrative duties meaning that their workload allocation for research is minimum. For example, a Full Professor without any administrative duties has 50% of his or her workload for research while a Full Professor with administrative duties can have 25% of workload for research. This means having a large proportion of senior staff will reduce the administrative burden and thus make available more senior staff who engage in research and mentoring early career researchers.

Based on scrutiny of profiles of academic staff of Universities in settings similar to UR, it is established that among staff with PhDs, around 50% are Senior Lecturers, 15% Associate Professors while 8% Full Professors. These proportions are used to project number of senior staff. The projection of publications is based on the following allocations of minimum numbers co-authored with other staff especially junior staff and research degree students:

- Full Professors with 0.5 FTE to publish 3 papers in a year.
- Associate Professors with 0.5 FTE to publish 2  $\frac{1}{2}$  papers in a year. This means in the first year there should be proof of three published or accepted papers and at least two in draft form or submitted
- Senior Lecturers with 0.4 FTE to publish 2 papers in a year
- PhD holders at Lecturer level with 0.4 FTE, to publish 1  $\frac{1}{2}$  paper in a year. This means in the first year there should be proof of two published or accepted papers and one in draft form or submitted
- Masters' degree holder with 0.35 FTE to publish 1 paper in a year.

The number of papers for other FTEs for the same rank will be computed proportionately. For example a 0.25 FTE Full Professor shall publish  $1\frac{1}{2}$  papers a year, in this case the first year there should be proof of two published or accepted papers and one in draft form or submitted.

Table 2 gives the projections of senior staff, publications and postgraduate students. The projections for publications include adjustments to reflect the co-authorship element. For example, other staff members who co-published with the professor can count the same three papers published by the professor.

Table 2: Projection of number of senior staff, publications and postgraduate students

	Baseline 2014	2015	2016	2018	2020	2024
Projected number of Senior Lecturers	118	182	239	306	530	616
Projected number of Associate Professors	44	55	72	92	159	185
Projected number of Full Professors	22	25	33	43	74	86
Projected number of papers by UR staff (the baseline is captured by the Web of Science, December 2013)	194	537	996	1,509	2,552	3,524
Annual per capita publication HC	0.1	0.35	0.63	0.86	1.32	1.66
Projected number Postgraduate students	729	1,040	1,860	2,600	3,500	4,200
Projected number of Doctoral Students	52	347	620	867	1,167	1,400

Table 3: below shows recent college data of staff who are still in training or are yet to start training, while Table 4 shows a staff training plan for the existing Academic staff.

Table 3: College data of staff who should be on staff-development

	Numl holde studie	rs on	Masters PhD	Number	r with Maste	ers	hold	helor	of degrees on audies	Number degrees	with	Bachelor
	F	M	Total	F	M	Total	F	M	Total	F	M	Total
CAVM	4	13	17	25	81	106	5	18	23	8	43	51
CASS	8	12	20	18	26	44	5	0	5	3	20	23
CBE	3	16	19	6	20	26	0	0	0	0	3	3
CE	7	29	36	31	101	132	5	18	23	6	4	10
CMHS	13	17	30	15	43	58	10	10	20	2	8	10
CST	8	30	38	24	149	173	11	39	50	22	89	111
TOTAL	43	117	160	119	420	539	36	85	121	41	167	208

Table 4: Staff training Plan for existing UR academic staff

	Number of PhD/doctorate holders in 2014	Number to have completed PhD/doctorate studies by 2017	Number to have registered for PhD/doctorate studies by 2017	Number to have registered and completed masters by 2017	Number to have completed PhD/doctorate by 2024
CAVM	41	59	129(19.3%)	51(22.3%)	180
CASS	49	20	49(7.3%)	23(10.1%)	72
CBE	21	40	36(5.4%)	23(10.1%)	59
CE	38	74	155(23.1%)	10(4.4%)	165
CMHS	36	49	78(11.6%)	10(4.4%)	88
CST	59	91	223(33.3%)	111(48.7%)	334
TOTAL	244	333	670(100%)	228(100%)	(898) 853 <sup>1)</sup>

Table 5: Staff required registering for Masters or PhD/doctorate per College annually (2015-2017)

	Number to register for PhD/doctorate per year	Number to register for masters per year
CAVM	43 (19.3%)	17(22.3%)
CASS	16 (7.3%)	8(10.1%)
CBE	12 (5.4%)	8(10.1%)
CE	52 (23.1%)	3(4.4%)
CMHS	26 (11.6%)	3(4.4%)
CST	74 (33.3%)	37(48.7%)
TOTAL	223(100%)	76(100%)

In this Strategic Framework the following policy instruments are proposed:

- a) Key Performance Indicators (KPI) for research to ensure the implementation of the Workload framework. These will form part of the performance contracts of academic staff. For example 50% of the workload of 0.5 FTE Full Professor for doing research. This means, the professor will collect 50 points out of 100 from the research KPIs.
- b) UR Research Incentive Scheme that encourages staff to put more effort in research with clear performance indicators
- c) A UR Research Fund Scheme to ensure sustainable research funding that takes into considerations the annual increase of the needed money.
- d) Guidelines for establishing Research Institutes and Research Centres

Other frameworks that should be proposed in the near future are: Dissemination, research communication and research uptake policies to ensure UR research is used to influence policy and practice

#### 4. PROPOSED STRATEGIES

## 4.1. Key Performance Indicators for Research, Innovation and Technology Transfer

Below in Table 6, performance indicators for research and points for each indicator are proposed. To measure the research performance of a given staff, a set of indicators will be used. The concerned staff will select indicators he or she thinks will be able to attain in the concerned year and put them in his or her annual performance contract. Total marks of selected set of indicators should be equal to the percentage of workload allocated to the staff. For example, an Associate or a Full Professor who has no administrative obligation will prove that he or she spent 50% of his or her academic workload on research by collecting 50 marks from the indicators given in Table 5.

In order to ensure that staff do publish, 50% of the points should come from A (or C) and B. For example, a 0.5 FTE Full professor should gather 25 marks from A and B (and or C for those dealing with creative work).

Table 6: Key Performance Indicators for research

Ke		Performance		Means of verification		
	y rformance	Indicators for Research	Overall Grade	(i.e. How to		
	eas (KPA)	marcators for Research	(Number of	Measure)		
	RESEARCH		points out of 100)	Measurey		
as	stipulated		points out of 100)			
in	the UR					
	ademic					
	orkload					
	amework					
FIC	illework	Successful bid of a	10	- Project reports		
			10	scrutinised by peers		
		research proposal	5	scrutilised by peers		
		Completion of a research	5			
A.	Engagement	project	-			
***	and	Principal Investigator of	5			
	publication	a Research Project				
	of research	Ordinary participant in a	4			
	projects	research project				
		Member of a research	10			
		Project involving				
		international				
		collaborators				
B.	Writing	Published the required	20	- Publications		
	refereed	number of papers		- Journal rating/		
	articles,	(according to the rank)		impact factor - Citations		
	books, book chapters and	in indexed journal/ book		- Citations		
	other	chapters [e.g. Full				
	publications	Professor to publish 3				
	publications	papers]. For less papers				
		the marks will be given				
		proportionately. E.g.				
		Marks for 2 out of 3				
		papers= 2/3x20.				
		Published the required	25			
		number of units				
		(according to the rank)				
		in journals with impact				

		factor		
		factor.	10	
		Published at least 1	10	
		journal article with		
		international		
		collaborators	-	
		Published Consultancy	5	
		report with ISBN		
		(including standards e.g.		
		HDI reports )		
		Published policy brief,	5	
		popular science		
		communication to		
		newspapers, newsletters		
		and documentaries		
		Translations of research	5	
		book (with ISBN)		
		Registered a Patent/	15	scrutiny of peer
		copyright		review reports of
		e.g. discovery of a new	10	creative work patent/
		variety of seeds or		copyright documents
		animals		by faculty committee
		e.g. discovery of new	10	dealing with
C.	Creative	drugs or diagnostics		performance contract
	work	Engineering inventions	10	and line manager (s)
		Fine and Performing Art	10	
		work (e.g. composing		
		music, theatre work,		
		production of a film,		
		sculpture, painting)		
		e.g. architectural works	20	
D.	Study for	Making very good	20	- Scrutiny of study
	higher	progress according to		plans and progress
	research	the study plan		report
	degrees or	Completion of studies on	25	- Testimonials of prize
	programmes	time		
	to maintain requisite	Wins a prize	25	
	qualifications	-		
	4	Oral or poster	10	- Writings scrutinised
		presentation at peer	_~	by peers
		reviewed international		- Conference
Г	December 1	conference		programs
E.	Presentation of scholarly	Oral or poster	5	- Proof of attendance/
	of scholarly papers in	presentation at a peer		mission clearance
	refereed	reviewed local		
	conferences,	conference		
	workshops	Paper reviewer of	10	
	and seminars	indexed journals (2	10	
		marks per paper up to 5)		
		Editorial Board member	10	
		of indexed journals (2	10	
		or mueseu journais (2		

		marks per paper up to 5)		
		Directing art	10	
		performances, plays and		
		dances (2 marks per		
		paper up to 5)		
		External Examiners of	10	- Appointment letters
F.	Refereeing,	PhD thesis (2 marks per		scrutinised by line
	examination	paper up to 5)		manager
	and review	External Examiners of	5	
	of grants	master's thesis (1 mark		
	proposals,	per paper up to 5)		
	journal articles,	Assessor of ICT related	5	
	dissertations	products		
	and theses	Judge (including Gacaca	5	
	and theses	court)		
		Visiting Academic /	5	- Invitation letters
		Fellowship at external		- Registration
G.	Professional	Universities		certificates
	Developme	Getting professional	5	All scrutinised by line
	nt for	registration (e.g.	0	manager
	research	Engineer, health related,		
		advocate)		
		Training junior staff (e.g.	5	- Training
Н.	Mentoring	research methodology,	0	programmes
	junior	academic writing),		scrutinised by line
	researchers	For example, training	5	manager
	and	interns, supervising	3	
	academics	post-docs		
<del> </del>		Training material for	5	- Writings scrutinised
I.	Preparation	research and research	3	by peers
	and	higher degrees related		
	submission of research			
	and teaching	Courses	5	
	development	Curriculum development	o J	
	proposals	for Research and		
	proposais	Research higher degrees		

Each staff shall be required to have a Research ID<sup>®</sup>. The Colleges will use the Researcher IDs to evaluate the impact of the researcher, using indicators such as H-index.

As part of profiling academic staff shall have their profiles on the College websites and shall be required to deposit their publications on the UR Repository.

UR will set an annual target of research production. Each department, School and College will set its targets. The performance of Schools, Colleges and UR will be measured based on the targets. The performance contracts of Heads of Departments, Deans/ Directors, Directors of Research, Principals and Central level managers shall include at leas 40% achievements on Research production.

## 4.2. UR Research Incentive Scheme

Incentives are very important to encourage staff to devote more time in research activities. Although the main contributor to academic promotion is research and publications,

however, promotion itself is not an enough incentive that encourages staff to put much effort in supervising and conducting research above their normal workload. Proposed below is an incentive scheme that aims at encouraging staff to engage more in research.

#### 4.2.1. Staff Performance Research Fund

A staff member will earn money based on the type of an output of research or innovation or knowledge transfer or technology transfer he or she will produce as given in Table 7 below. The money earned shall be used to advance the staff member's research endeavours and not cash in pockets. The rates will be reviewed from time to time, taking account the available funds.

Table 7: Incentive rates

Incentive Item	Incentive	
	amount RWF	in
International Patent	4,000,000	
International Journal article	2,000,000	
Book based on research with credible international publisher	3,000,000	
Chapter in a Book based on research with credible international publisher	1,000,000	
International peer reviewed Conference paper published in special journal issues	500,000	
A completed PhD thesis under supervision of the concerned staff	2,000,000	
A completed MPhil or Master's thesis by research (of 15 months duration or more) under supervision of the concerned staff	1,000,000	
A completed Master's by coursework and dissertation	750,000	
Creative art (music, sculpture, painting, theatre, etc.)	2,000,000	
A new research or innovation product (e.g. Software, new crop or animal variety )	2,000,000	
Local Journal article	100,000	
Local Conference article published in proceedings	50,000	

UR will create an account for each academic staff member known as UR Staff Performance Research Fund (UR-SPRF). This account will be managed by UR but will be fully utilized by the staff.

- a) On 1st July each year, each staff member must submit to the College Research Directorate a complete list of his /her publications during the ended fiscal year. The publications include: Patents, Books, Chapter in a Book, International reviewed Journals, Peer Reviewed International Conferences, Local reviewed Journal, and Peer Reviewed Local Conference.
- b) UR will issue a list of acceptable credible international and national journals and publishers of research Books on 1<sup>st</sup> July of every year. Also UR will issue guidelines that can be used for defining "International Journal", "Local Journal" and International peerreviewed conferences.
- c) The staff must submit all the documents that show that his/ her publications are published / accepted in the UR recognized journals and or peer reviewed International conferences.
- d) The College Research Directorate will calculate the amount of money earned by the staff as a result of his research and publication activities. The calculated amount is put on the SPRF account.

- e) The staff can use this SPRF income to support and facilitates his/her research activities as follows:
  - (i) Attending International Conferences; the staff can attend any number of conferences as his/her personal research fund can finance the cost of the conferences.
  - (ii) Ordering reference books related to his/ her research or to the researches of the postgraduate students he/she is supervising
  - (iii) Some material and components needed for his/her research or for researches of the postgraduate students he/she is supervising
  - (iv) PhD Scholarships and post doctoral grants
  - (v) Needed specialized software packages, Laptops,
  - (vi) And others as decided by the UR-RPGS Committee
- f) To use the fund it is sufficient for the staff to fill a form, attach supporting invoices and submit them to the finance section managing the SRF.
- g) All the material issued less than RF200,000 are considered consumable and above this value will be UR property.

# 4.2.2. Recognition of Research Excellence

UR will recognize individuals (researchers, managers), departments, Schools or Centres and Colleges for their research excellence. Such recognition shall be rewarded by certificates, cups and medals, and the winners shall be presented with the awards at the 1<sup>st</sup> of May (Labour Day) celebrations as well as featured in the Annual Research Report. Guidelines and mechanisms to identify winners will be proposed.

#### 4.3. UR Research Fund Scheme

UR Research, Innovation and Technology Transfer are currently almost entirely donor dependent. Diversification of sources is imminent. Furthermore, UR needs funds to be able to support the financial needs of various researches important to UR that cannot be funded by donors, such as supporting postgraduate research theses and to finance the incentives needed to encourage staff to run and supervise researches. It is proposed that UR establishes a "UR Research Fund" (UR-RF) for those purposes. The UR-RF will be controlled centrally by the UR Directorate of Research and Postgraduate Studies and will be managed by UR. Some of the possible sources of the fund are:

- a) Government subsidies. The government to give a certain proportion of its income for Research, innovation and Technology Transfer, including scholarships and grants for Doctoral and Masters research students,
- b) International Organisations,
- c) Private contracts: 5% from the value of any private contract signed between a staff member and any organization, will go to UR-RF.
- d) Evening Classes Fees: 5% of the fees of the evening classes will go to the fund,
- e) Research Postgraduate degrees registration fees: 5% of the registration fees of the research postgraduate degrees will go to UR-RF,
- f) UR Companies: 1% of the income of the UR companies goes to the fund (this includes the MS-UNR, CEB and Imanzi),
- g) Donations from the private sector,

The UR-RF will be used for the following:

(i) Supporting researches that are aligned closely with University strategic priorities. The general principle governing the allocation of all research funding in the University is

- that it should be seen as an investment that will maximise the range of outcomes that the University expects to result from staff and student research.
- (ii) Supporting the postgraduate research theses that will have outcomes on the society but have no direct financial outcome for UR.
- (iii) Supporting early career researchers and is allocated by the UR-RPGS Committee.
- (iv) Supporting PhD scholarships
- (v) Supporting postdoctoral fellowships where post-docs from outside are invited at UR
- (vi) Financing the UR Staff Performance Based Research Fund (SPRF)

## 4.4. UR Guidelines for establishing Research Institutes and Research Centres

This will be presented in a separate paper, after discussions by the UR-RPGS Committee

#### 5. IMPLEMENTATION PLAN

#### 5.1. Sensitization of the researchers

After the approval of the strategy by Senate, the Office of the DVCAAR will arrange a road show to all the campuses to meet the academic staff and the academic leaders to discuss the strategy and its implementation. Many of the initiatives will be implemented at School and Departmental levels, so it is essential that the strategy is well understood by all the academics

### 5.2. Information sharing

All the necessary documents (e.g. policies, procedures and guidelines) will be available on the UR and College websites. Staff in the Directorates of Research and Postgraduate Studies at UR and College will be available to provide or facilitate availability of information to the researchers.

# 5.3. Monitoring of implementation

The College Directors responsible for Research and Postgraduate studies are key to the success of the strategy. They will be resources persons to the researchers as well as to College/School and Departmental leadership on issues pertaining to the implementation of the strategy. They will also be responsible for liaising with the UR Directorate to provide data on implementation, which will be used to provide an institutional perspective. The Principal and College Academic Councils, based on reports generated by the College Directorates of Research and Postgraduate Studies, will monitor progress on implementation of the strategy. It is, therefore, important that individuals appointed to head the College Directorates of Research and Postgraduate Studies must be experienced researchers with a fair understanding of the national and global research landscape; capable of advocacy and are willing to mentor others.

Prof. James McWha Vice-Chancellor.