### **Structure of Submission**

**QUARTER 2 Performance Report** 

Summary of Vote Performance

Cumulative Progress Report for Projects and Programme

**Quarterly Progress Report for Projects and Programmes** 

**QUARTER 3:** Workplans for Projects and Programmes

**QUARTER 4: Cash Request** 

Submission Checklist

### HALF-YEAR: Highlights of Vote Performance

### V1: Summary of Issues in Budget Execution

This section provides an overview of Vote expenditure

(i) Snapshot of Vote Releases and Expenditures

Table V1.1 below summarises cumulative releases and expenditures by the end of the quarter:

### Table V1.1: Overview of Vote Expenditures (UShs Billion)

(i) Excluding	Arrears, Taxes	Approved Budget	Released by End	Spent by End Dec	% Budget Released	% Budget Spent	% Releases Spent
	Wage	4.069	2.114	2.102	51.9%	51.7%	99.5%
Recurrent	Non Wage	1.540	0.730	0.653	47.4%	42.4%	89.4%
	GoU	7.030	4.101	3.224	58.3%	45.9%	78.6%
Developmer	t Donor*	0.000	0.000	0.000	N/A	N/A	N/A
	GoU Total	12.640	6.945	5.980	54.9%	47.3%	86.1%
Total GoU+D	onor (MTEF)	12.640	6.945	5.980	54.9%	47.3%	86.1%
(ii) Arrears	Arrears	0.000	0.000	0.000	N/A	N/A	N/A
and Taxes	Taxes**	1.200	0.000	0.000	0.0%	0.0%	N/A
	Total Budget	13.840	6.945	5.980	50.2%	43.2%	86.1%
(iii) Non Tax	Revenue	0.100	0.000	0.000	0.0%	0.0%	N/A
	Grand Total	13.940	6.945	5.980	49.8%	42.9%	86.1%
Excluding	Taxes, Arrears	12.740	6.945	5.980	54.5%	46.9%	86.1%

The table below shows cumulative releases and expenditures to the Vote by Vote Function :

#### Table V1.2: Releases and Expenditure by Vote Function\*

Tuble v 1.2. Releases and Expenditure by vote I and	, uion					
Billion Uganda Shillings	Approved	Released	Spent	% Budget	% Budget	%
Bunon Ogunuu Smungs	Budget			Released	Spent	Releases
						Spent
VF:0651 Industrial Research	12.74	6.94	5.98	54.5%	46.9%	86.1%
Total For Vote	12.74	6.94	5.98	54.5%	46.9%	<mark>86.1%</mark>

\* Excluding Taxes and Arrears

### (ii) Matters to note in budget execution

N/A

# Table V1.3: High Unspent Balances and Over-Expenditure in the Domestic Budget (Ushs Bn) (i) Major unpsent balances

**Programs and Projects** 

0.74Bn Shs Programme/Project: 0430 Uganda Industrial Research Institute

Reason: Funds are already committed by contractual obligations, local purchase orders to suppliers of services, works and delivery of products

#### (ii) Expenditures in excess of the original approved budget

### HALF-YEAR: Highlights of Vote Performance

\* Excluding Taxes and Arrears

### V2: Performance Highlights

This section provides highlights of output performance, focusing on key outputs and actions impelemented to improve section performance.

Table	V2 1.	Kev	Vote	Output	Indicators	and Fy	penditures*
Table	V 4.1.	ney	v ute	Output	. muicatoi s	anu Ex	penuitures

Vote, Vote Function Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans
Vote Function: 0651 Indust	rial Research		
Output:065101	Administation and Support Serv	ices	
Description of Performance:	To recruit 30 employess; pay salaries & other staff benefits to 235 employees; Asset insurances, utility & property expenses, communication and general supplies, maintenance and professional services paid.	A total of 39 new employess were recuited; and salaries of 228 paid Asset insurances, utility & property expenses were paid. Communication and general supplies, maintenance and professional services were paid. Required logistics and adminstrative support was provided for the smooth operations of the Institute.	N/A
Performance Indicators:			
Payment of all utility bills, subscriptions and insurances expenses etc	100	100	
No. of staff recruited	30	39	
No. of staff hose salaries and benefits have been paid	230	228	
Output Cost Output:065102	: UShs Bn: 5.710 Research and Development	) UShs Bn: 2.755	5 % Budget Spent: 48.3%

Vote, Vote Function Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans
Key Output Description of Performance:	=	<ul> <li>Following the completion of the Design Phase (Phase I) to Establishing an Essential Oil Pilot Project in Uganda. The Establishment Phase (Phase II) commenced in December 2012 with training of two UIRI technical staff conducted and hosted at the CSIR.</li> <li>Procurements of Plant Material, distillation unit, organic certification weed mat, are under the guidance of CSIR are under the guidance of CSIR are under the guidance of CSIR are underway. A Memorandum of Understanding is being finalized between UIRI and National Crop Resource Research Institute (NaCRRI) where the pilot will be hosted.</li> <li>18 samples were received or collected from both external and internal clients for chemical analysis and characterization. Analysis certificates were issued.</li> <li>2 interns trained in basic laboratory practices and analysis</li> <li>Research on application of zeolytes in waste water treatment and Processing of xanthan gum from cassava is ongoing.</li> <li>Under product development different food product recipes have been developed and standardized. 30 milkshake samples have been developed (10 pineapple flavor, 10 mango flavor and 10 passion flavor.) The milk shake is undergoing shelf life study and full scale production will be undertaken as soon as possible.</li> <li>Various jams and pastes have been developed</li> <li>Prototypes for product formulations for handmade paper have been developed.</li> <li>Several paper products were produced like bags, beads, cards. Continue to work with the Incubatee oribags</li> </ul>	N/A
		innovations as well as carry out day to day activities of	

Vote, Vote Function Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans
		developing products	
		•70 samples were tested for	
		Microbial safety in food, water,	
		beverages and cosmetic	
		products. These were both for	
		internal and external clients	
		•Research on Pre & Post Harvest Technique of Shea	
		Butter and Shea Butter Oil is	
		ongoing.	
		•Nabusanke Fruit Juice	
		Processing Project-Kayabwe:	
		Formulation of Splendid-	
		Orange fruit drink for scale-up	
		has been finalized.25 cartons of	
		300ml RTD orange fruit drink	
		and 38 cartons of 500ml RTD	
		orange fruit drinkwere produced.	
		•Formulation for scale up of	
		Splendid-Pineapple Fruit drink	
		is underway •The Ceramic /Material and	
		Minerals Engineering Unit developed 5 flower vases, 20	
		ceramic artificial corals and	
		analyzed 230 samples	
		•Development of different	
		products like flower vases,	
		Ceramic artificial corals; and	
		analysis of samples for body	
		formulations is ongoing.	
		•Research on Gem/stone cutting	
		technology, ceramic artificial	
		corals, ceramic buttons, ceramic	
		water filters, bentonite anti-acne	
		powder and school chalk is ongoing.	
		•Kabale Potato Processing	
		Plant: 6.835 tonnes of raw	
		material (Potato) were	
		processed into 6,672 packs of	
		Emondi and supplied to various	
		supermarkets for sale.Continued	
		production of Potato crisps has	
		provided an assured ready	
		market for farmers and in effect	
		increasing their household	
		incomes. Continued production	
		of potato crisps is also aimed at increasing level of output,	
		training Production team on	
		Safety and Product quality	
		improvement, putting into place	
		all the corrective actions	
		required for UNBS audit and	
		Certification.	
		•Lira Peanut Research and	

Vote, Vote Function Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans
		Processing Centre: Acquired the UNBS Quality mark as well as certification. Developed peanut products with a brand name	
		GRANDY. 612 jars of Grandy Peanut butter (Crunchy) and	
		1000 jars of Grandy Peanut Butter (smooth) were	
		produced. Research on value addition to	
		Peanuts so as to break the monotony of plain ordinary	
		peanut butter that is available on the market is ongoing.	
		•Research on mushroom aimed at domesticating a local	
		mushroom variety-Agaricus	
		(Button Mushroom) is ongoing. •5 cosmetics products	
		developed together with Amagara Skincare LtDProducts	
		are being commercialized. The company is already	
		commercializing their products under the Brand name Amagara	
		Skin Care products. High quality herbal cosmetics have	
		been formulated for the company and are innovatively	
		producing branded products for contract clients	
		•2 intern assistant research technicians in microbiologyThe	
		interns have been taken on as staff since we were short of that	
		level of skillThey are working	
		as analysts •UIRI analyzed 80 samples for	
		microbial testing. Reports written and submitted to	
		respective clients •Invitro assessment of	
		antibacterial activity of traditionally used herbs against	
		S.pneumoniae A study to assess the antibacterial effect of some	
		identified herbs on ear infection; aimed at determining	
		the efficacy of the herbal concoctions. This experiment is	
		ongoing. • The Institute is establishing	
		the molecular biology unit at UIRI biotechnology centre	
		•1 staff has trained in cosmetics	
		makingand 3 groups have received training in comsmetic	

Vote, Vote Function Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans
		making from UIRI	
		<ul> <li>Derivation of lignolytic</li> </ul>	
		enzymes - A study to derive	
		lignolytic enzymes from white	
		rot fungi is underway. Strains of white rot fungi collected and	
		purified did not serve the	
		intended purpose. We are	
		prospecting for other strains.	
		The experiment did not yield	
		desired result and is being re-	
		done using other strains	
		<ul> <li>UIRI partnered with Amagara</li> </ul>	
		cosmetics company to formulate	
		various cosmetics products for	
		Amagara cosmetics company.	
		The process is already advanced	
		and several formulae have been developed. Amagara	
		successfully started her pilot	
		stage.Several products formula	
		have been developed and are	
		being marketedCosmetics	
		formulae based on available raw	
		materialsMore formulation to be	
		done and continuous	
		improvement of formulae	
		•A polypyrrole microarray	
		technique for analysis of	
		aflatoxin B1 in fermented	
		cassava flour Preparations for research are under way. This is	
		a demand driven study by the	
		cassava processors in Arua	
		district of Uganda, who require	
		a small tool for analysis to	
		demonstrate compliance to	
		standards. A proposal written	
		and submitted to a colleague in	
		South Africa for reviewProposal	
		•The cosmetics industry is	
		receiving a lot of interest in Uganda with a growing number	
		of clients demanding to be	
		trained to acquire skills in	
		making cosmetics. One	
		complete and functional line of	
		a 300kg capacity essential oils	
		biomass distiller was	
		successfully designed and	
		fabricated. The Essential oils	
		distilling unitis to be	
		operational and used as mobile	
		oil extractor. Pilot testing of the	
		oil distiller is on-going	
		•The Energy Systems	
		department at UIRI has	

Vote, Vote Function Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans
		designed an improved solar	
		dryer prototype system. The	
		improved solar dryer will help	
		in increasing the shelf life of	
		agricultural products as well as	
		adding value. Its adoption by	
		the farmers will boost their	
		incomes as well as improving	
		food security. Commencement	
		of its construction awaits the	
		relevant materials.	
		•A stove that uses stones as fuel	
		and generates electricity is	
		under design and development.	
		The Physical and chemical analysis of the stones to be used	
		as fuel is underway. The stove	
		will help in providing electricity	
		for domestic uses like lighting a	
		bulb, charging a phone; it will	
		also provide cooking needs of	
		the people especially in rural	
		areas. A sample of the stones	
		has sent to South Africa for	
		further analysis. Design and	
		construction of some parts of	
		the stove is underway	
		<ul> <li>Projects with International</li> </ul>	
		Collaborators, LEED at Boston	
		Univeristy, USA, Oxford	
		BioHorizons Ltd, UK and	
		UNECADesign of Solar	
		Powered Pulse Oximeter with	
		Boston University and Glucometer with Oxford	
		BioHorizons for UNECA	
		Healthcare Technology	
		Competition ( projects were	
		decided on and techincal	
		design elements currently being	
		researched)As a team the	
		Instrumentation Division has	
		decided on the projects and are	
		in the planning process which	
		entails design elements and	
		costing, these projects are of	
		extreme importance to the	
		Healthcare sector. This activity	
		is on-going activity	
		•Scientific assessment of low	
		cost road sealing using Geogrit	
		TechnologyCoordination of	
		research with the research	
		assistants from Makerere. The	
		research involves surveying of	
		the road, sampling of the road	
		materials, testing and analyzing	

Key Output	Approved Budget and Planned outputs	Cumulative Expension and Performance		Status and Reasons for any Variation from Plans	
		samples in designa government labora civil engineering d supporting Makere School of Enginee coordinate the rese ongoing. •362 products were analyzed for Micro Chemical, shelf life tests •Eshabwe product life testing and pac being tested •The bakery pilot p commercialization production of brea cakes.	tories. UIRI epartment is ere University ring to earch is e tested / obiological, e and quality quality, shelf ekaging are plant is under through		
Performance Indicators:					
No. of research projects undertaken to increase argeted value additon for ural industralisation to educe post harvest loss.	25		15		
No. of research projects nitiated and underway	45		20		
No. of new innovations and value added products leveloped	40		25		
Output Cost:	UShs Bn:	1.660 UShs Bn:	0.882	% Budget Spent:	53.1%
Dutput:065103 Ir	ndustrial and technologi				

Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans	
Description of Performance:	=	<ul> <li>•UIRI has continued to support Oribags Innovations as well as carry out day to day activities of handmade paper research to develop new unique products</li> <li>•Amagara a cosmetics incubatee attached to the Biotechnology laboratory continues to produce several product and they are supplied to a few supermarkets and beauty stores, the products continually undergo testing in the microbiology laboratory for conformity on safety and quality.</li> <li>•The Essential Oil Pilot anchor cultivation site shall be hosted at National Crop Resources Research Institute (NACRRI) Namulonge. Two other firms/farms (M/S Millionaire Gals International Limited and M/S Adeke Farm Limited) who were selected during the Design Phase will participate in the trail pilot which is aimed at collecting data, assessing the performance of Essential Oil business in Uganda and will lead to the establishment of Essential Oil Sector in Uganda.</li> </ul>	Lack of entrepreneurship and other cultural or societal impediments render projects to fail to take off even after they have been commissioned. Yet the traditional methods of entrepreneurial skills training, although ubiquitous, are not delivering the desired impact. A lot of farmers and aspiring entrepreneurs have workshop certificates adoring their walls or nicely packed in personal	
Performance Indicators:				
No. of technologies deployed with incubatees	10	10		
No. of SME's created hrough incubation	40	40		
No. of industrial Incubatees raken on	5	3		
	: UShs Bn: 1.28	38 UShs Bn: 0.502	2 % Budget Spent: 39.0%	
Output Cost Output:065104	Model Value Addition Centre E		0 1	

Vote, Vote Function Key Output	Approved Budget and Planned outputs		fumulative Expen nd Performance	diture	Status and Reasons any Variation from	
Description of Performance:	The Institute will contin carry out routine genera period civil works that maintenance	I and framed framed framed framed framed framed frame	etting up value ad- acilities by UIRI is he GOU's strategy neouraging mass adustrialization at esource abundant a nits are to serve th he following ways: .Demonstration of f value addition ar viden awareness ar he public. .Act as hubs for ki nd skills transfer. .In partnership with ad capable private arough business in evelop and comme siscourage rural-url higration. .Work with Agricu- esearch institutions eveloping and pro arieties and anima uitable for high va is therefore mand he the Institute to ca arrying out genera eriod civil works r	in line with of every area. These e country in the benefits ad hence ad interest in nowledge the selected partners cubation ercialize a d products. at hence ban ultural s in moting crop l breeds lue products. atory to for continue with l routine and	N/A	
No. of products up-scaled and commercialized by the centres	20			10		
No. of model value addition centres established	5			3		
No. of local raw materials developed and populated in the scientific databases	30			16		
Output Cost:	UShs Bn:	0.463	UShs Bn:	0.194	% Budget Spent:	42.0%
empin cosn					0	

### HALF-YEAR: Highlights of Vote Performance

Vote, Vote Function Key Output	Approved Budget and Planned outputs	Cumulative Expenditure and Performance	Status and Reasons for any Variation from Plans	
Description of Performance:	Continued preventative / routine maintenance, upgrades of system and servicing of unplanned break downs. These include machinery equipment, of electricial system, water and drianage,cold rooms, air conditioners. Replacements and refabrication of parts.	Continued preventative / routine maintenance, upgrades of system and servicing of unplanned break downs. These include machinery equipment, electricial, water & drianage systems ,cold rooms, air conditioners. Replacements and refabrication of parts.	N/A	
Performance Indicators:				
No. of technologies applied to reduce utility costs	20	7		
No. of on-site machines and equipment maintained	150	80		
No. of off-site pilot plants maintained	20	15		
Output Cost:	UShs Bn: 0.32	5 UShs Bn: 0.111	% Budget Spent: 3	4.0%
Vote Function Cost	UShs Bn: 12.74	0 UShs Bn: 5.980	) % Budget Spent: 4	6.9%
Cost of Vote Services:	UShs Bn: 12.74	<b>)</b> UShs Bn: <b>5.98</b> (	<b>%</b> Budget Spent: <b>4</b>	6.9%

\* Excluding Taxes and Arrears

UIRI has made giant strides in meeting its mandate and to perform beyond expectations. To this end; •UIRI has been designated East African Community (EAC) Centre of Excellence status in Industrial Research and Applied Sciences. This recognition is a vote of confidence in UIRI's progress and technical contribution to the development and use of technology as a tool for socio-economic transformation of the region.

•Prof. Charles Kwesiga was elected unopposed, 1st Vice President of the Prestigious World Association Industrial and Technological Research Organization on 9th November 2012 during the Biennial Congress AND General Assembly in New Delhi, India.

•In yet another spectacular achievement, KATI FARMS LTD an incubatee producing fish sausages at UIRI won a best incubation project award at the European Market Research Centre (EMRC) Agribusiness Forum in Dakar, Senegal, on 27th November 2012.

•Another notable achievement is UIRI's collaboration with the Council for Scientific and Industrial Research (CSIR) of South Africa. The institute has embarked on a project on Essential Oils production for commercial application. Essential oils are extracts from aromatic plants that can be used in the manufacture of perfumes, fragrances, cosmetics and aromatherapy products, with an estimated demand of 600 tons per annum on the European market alone.

•In furtherance of this collaboration, the Engineering Division at UIRI has successfully fabricated a mobile essential oil extraction technology.

•In regard to business incubation UIRI's approach relies on offering a cocktail of services to various entrepreneurs. The Institute's incubatees have been afforded the opportunity to develop and commercialize well-packaged quality products such as Justjoy Juice, Mega Fresh Milk, Nile Coffee, Nzori Juice Concentrate, Amagara Skin Care cosmetic products, to mention but a few. The Mushroom Training and Resource Center (MTRC) in Kabaleis now also certified to export mushrooms to the United Kingdom market.

•In a related development, UIRI researchers have also successfully mastered the rearing of the White Button Mushroom (Agaricus species), the first of its kind in Uganda. The speciesenjoys the highest preference on the international market, due toits unique attributes in terms of nutritional value, which far outweighs the oyster mushroom currently prevalent on the Uganda market. The next phase of the project will involve

### HALF-YEAR: Highlights of Vote Performance

scale-up for commercial production.

•Several satellite value addition projects have also been operationalized in various parts of the country. These include a Peanut Processing Plant in Lira that acquired UNBS Quality Marks for its GRANDYS CRUNCHY and GRANDYS CREAMY Peanut butter brands.AFruit Juice Processing facility

•The Arua fruit Juice facility will soon be commissioned, starting with production of Mango Juice

•The Fruit Juice plant at Nabusankeis already in test production of a product branded "Splendid".

•The facilities also act as centres for the promotion of rural industrialization by promoting best manufacturing practices, providing immediate markets for farmers' produce and providing employment for local youth and graduates.

•UIRI has established a multifaceted Instrumentation Division to facilitate electronic product development as well as capability for local maintenance and repair of electronic equipment. The new age techniques being applied relies on use of embedded system circuit designs that use microcontrollers for development of sensors, controls, monitoring and automated technologies in order to overcome technological constraints such as lack of automation in industry as well as agriculture, health, security and telecommunications sectors.

•Submission of Vaccine Product Dossier to NDA for marketing approval was cleared with a No-Objection obtained from Ministry of Agriculture to deploy vaccine on the market.

### **Table V2.2: Implementing Actions to Improve Vote Performance**

Planned Actions:	Actual Actions:	Reasons for Variation
Vote: 110 Uganda Industrial Research Ins	stitute	
Vote Function: 0651 Industrial Research		

# $Vote: 110 \ {\tt Uganda \ Industrial \ Research \ Institute}$

Planned Actions:	Actual Actions:	<b>Reasons for Variation</b>
Two of UIRI's staff are currently undertaking their PhD's in South Africa. Other staffs have had opportunity to train under the established platforms of collaboration. This highly trained resource will form adequate capacity to undertake appropiate R&D	Development of human resource skills needed for comprehensive handling of new and already existing technologies, market and product research to match appropriate and cost effective technologies, management of academia and industry technology transfer.•2 women groups were trained in making paper products. •10 farmer groups have been trained on fruit juice and vegetable processing, from which they developed various fruit juice and vegetable products. •2 new staff were trained in Sample Reception, Handling & Analysis, Record Keeping, Laboratory safety and use Basic Instrumentation •Two small groups were trained in Peanut processing and in adding value for a lasting shelf life. •Farmers have been trained on better post harvest handling techniques to reduce on the level of aflatoxins in the nuts. •Two (2) staff attended the AfricaLics PhD Academy in Nairobi Kenya Learnt skills in policy innovation analysis Reports written and submitted •1 Staff attended Workshop on Organization and Accreditation of LaboratoriesSkills learntReports written and submitted •2 Staff attended basic training on biosafety cabinets, fume hoods, PCR Thermal Cyclers and Ultra-low temperature freesers Skills learntReports written and submitted •1 staff attended workshop in Quality AuditSkills learntReports written and submitted •1 Staff attended workshop on the Winter School of Biotechnology in Egypt Skills learntReports written and submitted •1 Staff attended training on Industrial biotechnology in China Skills learntReports written and submitted •2 Staff attended conference on shea butter in USASkills learntReports written and submitted	Ν/Α

Planned Actions:	Actual Actions:	Reasons for Variation
The Institute aims for fully functional facilities by the end of FY 2012/13. Awareness campaigns are being carried out to form farmer groups for sustainable supply of raw materials like specific species of potatoes, peanuts and fruits that are of interest	Setting up value addition facilities by UIRI is in line with the GOU's strategy of encouraging mass industrialization at every resource abundant area. These units are to serve the country in the following ways: 1.Demonstration of the benefits of value addition and hence widen awareness and interest in the public. 2.Act as hubs for knowledge and skills transfer. 3.In partnership with selected and capable private partners through business incubation develop and commercialize a range of value added products. 4.Create employment hence discourage rural-urban migration. 5.They will assist to reduce the post harvest loss 6.Work with Agricultural research institutions in developing and promoting crop varieties and animal breeds suitable for high value products.	N/A

Planned Actions:	Actual Actions:	<b>Reasons for Variation</b>
UIRI looks to strengthen its industrial incubation initiatives aimed at boosting specific industrial sectors for commercialization of competitive quality products developed by the Institute.	In partnership with capable private partners through business incubation will develop and commercialize a range of value added products. Work with Agricultural institutes in developing crop varieties and animal breeds suitable for high value products. The Ugandan Industrial Research Institute (UIRI) is at the heart of driving small and medium enterprise development in the use and application of technological innovations for commercialization of value added products in Uganda. The Institute has partnered with the CSIR Enterprise Creation for Development which has a track record in the development and commercialization essential oils based enterprises in the region. •In yet another spectacular achievement, KATI FARMS LTD an incubatee producing fish sausages at UIRI won a best incubation project award at the European Market Research Centre (EMRC) Agribusiness Forum in Dakar, Senegal, on 27th November 2012. •Another notable achievement is UIRI's collaboration with the Council for Scientific and Industrial Research (CSIR) of South Africa. The institute has embarked on a project on Essential Oils production for commercial application. Essential oils are extracts from aromatic plants that can be used in the manufacture of perfumes, fragrances, cosmetics and aromatherapy products, with an estimated demand of 600 tons per annum on the European market alone. •In furtherance of this collaboration, the Engineering Division at UIRI has successfully fabricated a mobile essential oil extraction technology. •In regard to business incubation UIRI's approach relies on offering a cocktail of services to various entrepreneurs. The Institute's incubatees have been afforded the opportunity to develop and commercialize well-packaged quality products such as Justjoy Juice, Mega Fresh Milk, Nile Coffee, Nzori Juice Concentrate, Amagara Skin Care cosmetic products, to mention but a few. The Mushroom Training and Resource Center (MTRC) in Kabaleis now also certified to export mushrooms to the United Kingdom market.	N/A

### HALF-YEAR: Highlights of Vote Performance

	Reasons for Variation
•In a related development, UIRI researchers have also successfully mastered the rearing of the White Button Mushroom (Agaricus species), the first of its kind in Uganda. The speciesenjoys the highest preference on the international market, due toits unique attributes in terms of nutritional	
value, which far outweighs the oyster mushroom currently prevalent on the Uganda market. The next phase of the project will involve scale-up for	
commercial production. •Several satellite value addition projects have also been operationalized in various parts of the country. These include a Boonut Processing Plant in	
include a Peanut Processing Plant in Lira that acquired UNBS Quality Marks for its GRANDYS CRUNCHY and GRANDYS CREAMY Peanut butter brands.AFruit Juice Processing	
facility •The Arua fruit Juice facility will soon be commissioned, starting with production of Mango Juice	
<ul> <li>The Fruit Juice plant at Nabusankeis already in test production of a product branded "Splendid".</li> <li>The facilities also act as centres for the</li> </ul>	
promotion of rural industrialization by promoting best manufacturing practices, providing immediate markets for farmers' produce and providing	
employment for local youth and graduates. •UIRI has established a multifaceted	
Instrumentation Division to facilitate electronic product development as well as capability for local maintenance and repair of electronic equipment. The new age techniques being applied relies on	
use of embedded system circuit designs that use microcontrollers for development of sensors, controls,	
monitoring and automated technologies in order to overcome technological constraints such as lack of automation in industry as well as agriculture, health, security and telecommunications	

### V3: Details of Releases and Expenditure

*This section provides a comprehensive summary of the outputs delivered by the Vote and further details of Vote expenditures by Vote Function and Expenditure Item.* 

### Table V3.1: GoU Releases and Expenditure by Output\*

Billion Uganda Shillings		Approved Budget	Released	Spent	% GoU Budget	% GoU Budget	% GoU Releases
	Page	e 17					

### HALF-YEAR: Highlights of Vote Performance

				Released	Spent	Spen
VF:0651 Industrial Research	12.64	6.94	5.98	54.9%	47.3%	86.1%
Class: Outputs Provided	9.35	5.02	4.44	53.8%	47.5%	88.5%
065101 Administation	5.61	2.84	2.76	50.7%	49.1%	96.9%
065102 Research and Development	1.66	1.03	0.88	62.2%	53.1%	85.4%
065103 Industrial Incubation	1.29	0.69	0.50	53.3%	39.0%	73.0%
065104 Maintenance - Civil works	0.46	0.27	0.19	58.3%	42.0%	71.9%
065105 Maintenance - Machinery and Equipment	0.33	0.19	0.11	58.3%	34.0%	58.2%
Class: Capital Purchases	3.29	1.92	1.54	58.3%	46.6%	80.0%
065172 Government Buildings and Administrative Infrastructure	0.46	0.27	0.15	58.3%	33.0%	56.6%
065176 Purchase of Office and ICT Equipment, including Software	0.13	0.07	0.04	58.3%	31.5%	54.0%
065177 Purchase of Specialised Machinery & Equipment	2.71	1.58	1.34	58.3%	49.7%	85.1%
Total For Vote	12.64	6.94	5.98	54.9%	47.3%	86.1%

\* Excluding Taxes and Arrears

### Table V3.2: 2012/13 GoU Expenditure by Item

Billion Uganda Shillings	Approved Budget	Releases	Expend- iture	% Budged Released	% Budget Spent	% Releases Spent
Output Class: Outputs Provided	9.35	5.02	<u>4.44</u>	53.8%	47.5%	88.5%
211102 Contract Staff Salaries (Incl. Casuals, Temporary)	4.07	2.11	2.10	51.9%	51.7%	99.5%
211103 Allowances	0.03	0.02	0.02	58.1%	59.9%	103.0%
212101 Social Security Contributions (NSSF)	0.41	0.20	0.18	50.0%	45.4%	90.8%
213001 Medical Expenses(To Employees)	0.20	0.11	0.08	58.3%	42.6%	73.0%
221001 Advertising and Public Relations	0.01	0.01	0.00	51.5%	13.8%	26.9%
221002 Workshops and Seminars	0.01	0.00	0.00	57.0%	31.2%	54.7%
221003 Staff Training	0.11	0.05	0.03	43.1%	29.0%	67.3%
221004 Recruitment Expenses	0.00	0.00	0.00	50.0%	0.0%	0.0%
221009 Welfare and Entertainment	0.06	0.03	0.03	52.2%	48.5%	92.9%
221011 Printing, Stationery, Photocopying and Binding	0.01	0.00	0.00	57.9%	32.8%	56.7%
221012 Small Office Equipment	0.03	0.01	0.01	25.0%	19.9%	79.5%
221017 Subscriptions	0.00	0.00	0.00	50.0%	24.5%	49.1%
222001 Telecommunications	0.07	0.04	0.03	51.1%	47.4%	92.8%
222002 Postage and Courier	0.00	0.00	0.00	50.0%	20.0%	39.9%
222003 Information and Communications Technology	0.11	0.06	0.03	56.2%	30.8%	54.7%
223001 Property Expenses	0.07	0.03	0.03	48.4%	47.4%	97.8%
223004 Guard and Security services	0.06	0.03	0.03	50.0%	50.0%	100.0%
223005 Electricity	0.25	0.14	0.11	57.6%	43.1%	74.9%
223006 Water	0.06	0.03	0.03	50.0%	50.0%	100.0%
224002 General Supply of Goods and Services	2.11	1.36	1.19	64.3%	56.1%	87.3%
226001 Insurances	0.11	0.04	0.03	42.5%	26.9%	63.4%
227001 Travel Inland	0.01	0.00	0.00	50.0%	46.2%	92.5%
227002 Travel Abroad	0.08	0.04	0.05	58.2%	63.7%	109.4%
227003 Carriage, Haulage, Freight and Transport Hire	0.01	0.01	0.00	50.0%	24.2%	48.3%
227004 Fuel, Lubricants and Oils	0.37	0.11	0.07	30.8%	18.4%	59.6%
228001 Maintenance - Civil	0.46	0.27	0.19	58.3%	42.0%	71.9%
228002 Maintenance - Vehicles	0.33	0.11	0.07	32.7%	22.1%	67.6%
228003 Maintenance Machinery, Equipment and Furniture	0.33	0.19	0.11	58.3%	34.0%	58.2%
Output Class: Capital Purchases	4.49	1.92	1.54	42.8%	34.2%	80.0%
231001 Non-Residential Buildings	0.46	0.27	0.15	58.3%	33.0%	56.6%
231005 Machinery and Equipment	2.83	1.65	1.38	58.3%	48.9%	83.8%
312206 Gross Tax	1.20	0.00	0.00	0.0%	0.0%	N/A
Grand Total:	13.84	6.94	<b>5.98</b>	50.2%	43.2%	86.1%
Total Excluding Taxes and Arrears:	12.64	6.94	<mark>5.98</mark>	54.9%	47.3%	86.1%

### HALF-YEAR: Highlights of Vote Performance

### Table V3.3: GoU Releases and Expenditure by Project and Programme\*

Table V5.5. Goo Releases and Expenditure by 110ject and 110gramme							
Billion Uganda Shillings	Approved	Released	Spent	% ~GoU	% ~GoU	% ~GoU	
Builon Ogunuu Shuungs	Budget			Budget	Budget	Releases	
				Released	Spent	Spent	
VF:0651 Industrial Research	12.64	6.94	5.98	54.9%	47.3%	86.1%	
Recurrent Programmes							
01 Headquarters	5.61	2.84	2.76	50.7%	49.1%	96.9%	
Development Projects							
0430 Uganda Industrial Research Institute	7.03	4.10	3.22	58.3%	45.9%	78.6%	
Total For Vote	12.64	6.94	5.98	54.9%	47.3%	86.1%	

\* Excluding Taxes and Arrears

Table V3.4: Donor Releases and Expenditure by Project and Programme\*

### **QUARTER 2: Cumulative Outputs and Expenditure by End of Quarter**

Annual Planned Outputs and Cumulative Outputs Achieved by End of	Cumulative Expenditures made by the End of the Quarter to
Quarter (Quantity and Location)	Deliver Cumulative Outputs UShs Thousand

#### Vote Function: 0651 Industrial Research

Recurrent Programmes

### **Programme 01 Headquarters**

**Outputs** Provided

Output: 06 51 01 Administation

	Item	Spent
Annual Planned Outputs:	211102 Contract Staff Salaries (Incl. Casuals,	2,102,188
- Recruit 30 New Employees	Temporary)	
	211103 Allowances	18,445
- Pay off current staff salaries and benefits	212101 Social Security Contributions (NSSF)	184,663
Incure Institute Assate Equipment Vakialas IT Servers and IT	213001 Medical Expenses(To Employees)	83,000
- Insure Institute Assets Equipment, Vehicles, IT Servers and IT Equipment	221002 Workshops and Seminars	1,560
Equipment	221003 Staff Training	12,507
- Clear Utility and property expenses	221009 Welfare and Entertainment	30,274
	221012 Small Office Equipment	5,565
-Enhance communication links	222001 Telecommunications	32,700
-Provide General Supplies	222002 Postage and Courier	399
-Meet obligations of Subscriptions and Professional Fees	223001 Property Expenses	34,097
Cumulatie Outputs Achieved by the end of the Quarter:	223004 Guard and Security services	30,700
39 new employees were recruited with 15 staff leaving for various	223005 Electricity	59,635
reasons. Salaries for 225 staff were paid. Asset insurances, utility	223006 Water	30,000
& property expenses were paid. Medical insurance cover was	226001 Insurances	10,285
provided for every employee and their immediate family.	227001 Travel Inland	3,212
Administrative services were rendered to the core departments of the Institute. Communication and general supplies were provided.	227002 Travel Abroad	48,862
Maintenance and professional services were paid for. Required	228002 Maintenance - Vehicles	23,187
logistics and administrative support was provided for the smooth	Total	2,755,278
operations of the Institute.	Wage Recurrent	2,102,188
Reasons for Variation in performance	Non Wage Recurrent	653,090
N/A	Non wage needed on NTR	0
		-

**Development Projects** 

#### Project 0430 Uganda Industrial Research Institute

Capital Purchases

Output: 06 5172 Government Buildings and Administrative Infrastructure

#### Annual Planned Outputs:

Civil works renovations and modifications to Ceramics lab facility Upgrading of storm water channel along the northern boundary Construction of the northern Boundary wall Upgrading of access road to the Eastern gate

Cumulatie Outputs Achieved by the end of the Quarter:

Evaluation of submitted bids for Modification and reconstruction of the ceramic unit and a packaging center of excellence is under way. Evaluation of submitted bids for construction of the Southern Boundary perimeter wall and drainage channel

**Reasons for Variation in performance** 

N/A

Total	152,274
GoU Development	152,274
Donor Development	0
NTR	0

Annual Planned Outputs and Cumulative Outputs Achieved by End of Quarter (Quantity and Location)	Cumulative Expenditures made by the End of the Deliver Cumulative Outputs	e Quarter to UShs Thousand
Vote Function: 0651 Industrial Research		
Development Projects		
Project 0430 Uganda Industrial Research Institute		
Output: 06 51 76 Purchase of Office and ICT Equipment, including So	ftware	
	Item	Spen
Annual Planned Outputs:	231005 Machinery and Equipment	39,75
ICT training & certification Procurement of ICT Back up system. Procurement and installation ICT Hardware and Software maintenance Internet hosting services		
Cumulatie Outputs Achieved by the end of the Quarter:		
ICT training & certification Procurement of ICT Back up system was completed Routine ICT Hardware and Software maintenance was carried out Internet hosting services continue to be offered		
Reasons for Variation in performance		
N/A		
	Total	39,751
	GoU Development	39,751
	Donor Development	0
	NTR	0
Output: 06 51 77 Purchase of Specialised Machinery & Equipment		
	Item	Spen
Annual Planned Outputs:	231005 Machinery and Equipment	1,344,015
<ul> <li>Essential oils extraction /distiliation equipments</li> <li>A flavor applicator for Potato project in Kabale</li> <li>A Biscuit production equipment line for Kabale</li> <li>A Savoury meat equipment for UIRI</li> <li>A range of different fruit juice pulpers for UIRI Procurement of bamboo strip polishing machine</li> <li>Fruits and Vegetables' machines and accessories</li> <li>Purchase of burger making machine</li> <li>Procurement of dairy equipment for one of the in-house Dairy incubatees</li> <li>Chill unit equipment for UIRI</li> <li>Bentonite Processing equipment</li> <li>Cosmetics and detergents technology</li> <li>Grains and animal feeds processing technology</li> <li>Refrigerated cool boxes</li> </ul>		

•The Briquette Processing technology has procured and delivered. The technology is aimed at promoting energy efficiency and sustainable biomass use. This awaits installation, training and commissioning in Kabale.

•Stainless steel floor grating have been fabricated and fixed as trench gratings in the dairy, juice and meat pilots plants

Reasons for Variation in performance

N/A

**1,344,015** *1,344,015* 

0

0

Total

NTR

GoU Development Donor Development

# Vote: 110 Uganda Industrial Research Institute

### **QUARTER 2:** Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs and Cumulative Outputs Achieved by End of	Cumulative Expenditures made by the End of the Quarter to	
Quarter (Quantity and Location)	Deliver Cumulative Outputs	UShs Thousand

#### Vote Function: 0651 Industrial Research

Development Projects

Project 0430 Uganda Industrial Research Institute

under the guidance of CSIR are underway. A Memorandum of Understanding is being finalized between UIRI and National Crop Resource Research Institute (NaCRRI) where the pilot will be hosted. •18 samples were received or collected from both external and internal clients for chemical analysis and characterization. Analysis

•2 interns trained in basic laboratory practices and analysis •Research on application of zeolytes in waste water treatment and

•Under product development different food product recipes have been developed and standardized. 30 milkshake samples have been developed (10 pineapple flavor, 10 mango flavor and 10 passion flavor.) The milk shake is undergoing shelf life study and full scale

Processing of xanthan gum from cassava is ongoing.

production will be undertaken as soon as possible. •Various jams and pastes have been developed •Producing fruit toffee is under way, •Wine still under fermentation and maturity

certificates were issued.

#### **Outputs Provided**

Output: 06 51 02 Research and Development

	Item	Spent
Annual Planned Outputs:	224002 General Supply of Goods and Services	791,882
<ul> <li>Annual Planned Outputs:</li> <li>To issue analytical testing certificates and reports for industrial products for chemical and microbiological quality to internal users (researchers) and external (private sector) users.</li> <li>To develop at least two new bamboo products.</li> <li>To develop food processes/product quality and safety standards.</li> <li>To formulate 2 new dairy products, and carry our market tests.</li> <li>To refine and adopt at least 2 dairy product technologies by SMEs</li> <li>To formulate 1 meat product</li> <li>To formulate 2 bakery products</li> <li>To develop 2 fruit and vegetable products</li> <li>To develop prototypes of a demo solar dryer, solar cooker, briquette machine, biogas plant and their accessories.</li> <li>To conduct capacity building and management of Energy Systems Unit</li> <li>To develop energy etficient lighting fixtures and electronic ballast</li> <li>To design biogas production, purification, and compressed storage system</li> </ul>	224002 General Supply of Goods and Services 226001 Insurances	791,882 17,963
To design wet Coffee processing technology		
To refine and upscale the poultry Hatchery To replicate food processing equipments To design of electronic applications To acquire phase 1 of Timber Kiln/Seasoning technology		
To develop and publish a Technology Catalogue of Food, Handmade paper, Ceramics and Other industrial products developed.		
Cumulatie Outputs Achieved by the end of the Quarter:		
•Following the completion of the Design Phase (Phase I) to Establishing an Essential Oil Pilot Project in Uganda. The Establishment Phase (Phase II) commenced with training of two UIRI technical staff conducted and hosted at the CSIR. Procurements of Plant Material, distillation unit, organic certification weed mat, are		

### **QUARTER 2: Cumulative Outputs and Expenditure by End of Quarter**

Annual Planned Outputs and Cumulative Outputs Achieved by End of	Cumulative Expenditures made by the End of the Quarter to	
Quarter (Quantity and Location)	Deliver Cumulative Outputs	UShs Thousand

#### Vote Function: 0651 Industrial Research

Development Projects

#### Project 0430 Uganda Industrial Research Institute

Prototypes for product formulations for handmade paper have been developed. Several paper products were produced like bags, beads, cards. Continue to work with the Incubatee oribags innovations as well as carry out day to day activities of developing products
70 samples were tested for Microbial safety in food, water, beverages and cosmetic products. These were both for internal and external clients

•Research on Pre & Post Harvest Technique of Shea Butter and Shea Butter Oil is ongoing.

•Nabusanke Fruit Juice Processing Project-Kayabwe: Formulation of Splendid-Orange fruit drink for scale-up has been finalized.25 cartons of 300ml RTD orange fruit drink and 38 cartons of 500ml RTD orange fruit drinkwere produced.

•Formulation for scale up of Splendid-Pineapple Fruit drink is underway

•The Ceramic /Material and Minerals Engineering Unit developed 5 flower vases, 20 ceramic artificial corals and analyzed 230 samples •Development of different products like flower vases, Ceramic artificial corals; and analysis of samples for body formulations is ongoing.

•Research on Gem/stone cutting technology, ceramic artificial corals, ceramic buttons, ceramic water filters, bentonite anti-acne powder and school chalk is ongoing.

•Kabale Potato Processing Plant: 6.835 tonnes of raw material (Potato) were processed into 6,672 packs of Emondi and supplied to various supermarkets for sale. Continued production of Potato crisps has provided an assured ready market for farmers and in effect increasing their household incomes. Continued production of potato crisps is also aimed at increasing level of output, training Production team on Safety and Product quality improvement, putting into place all the corrective actions required for UNBS audit and Certification. •Lira Peanut Research and Processing Centre: Acquired the UNBS Quality mark as well as certification. Developed peanut products with a brand name GRANDY. 612 jars of Grandy Peanut butter (Crunchy) and 1000 jars of Grandy Peanut Butter (smooth) were Research on value addition to Peanuts so as produced. to break the monotony of plain ordinary peanut butter that is available on the market is ongoing.

•Research on mushroom aimed at domesticating a local mushroom variety-Agaricus (Button Mushroom) is ongoing. TDC

• One complete and functional line of a 300kg capacity essential oils biomass distiller was successfully designed and fabricated. The Essential oils distilling unitis to be operational and used as mobile oil extractor. Pilot testing of the oil distiller is on-going

•The Energy Systems department at UIRI has designed an improved solar dryer prototype system. The improved solar dryer will help in increasing the shelf life of agricultural products as well as adding value. Its adoption by the farmers will boost their incomes as well as improving food security. Commencement of its construction awaits the relevant materials.

•A stove that uses stones as fuel and generates electricity is under design and development. The Physical and chemical analysis of the stones to be used as fuel is underway. The stove will help in providing electricity for domestic uses like lighting a bulb, charging a phone; it will also provide cooking needs of the people especially in rural areas. A sample of the stones has sent to South Africa for further analysis. Design and construction of some parts of the stove is underway •Projects with International Collaborators, LEED at Boston Univeristy, USA, Oxford BioHorizons Ltd, UK and UNECADesign of

### **QUARTER 2: Cumulative Outputs and Expenditure by End of Quarter**

Annual Planned Outputs and Cumulative Outputs Achieved by End of	Cumulative Expenditures made by the End of the Quarter to	
Quarter (Quantity and Location)	Deliver Cumulative Outputs	UShs Thousand

#### Vote Function: 0651 Industrial Research

Development Projects

#### Project 0430 Uganda Industrial Research Institute

J
Solar Powered Pulse Oximeter with Boston University and
Glucometer with Oxford BioHorizons for UNECA Healthcare
Technology Competition ( projects were decided on and techincal
design elements currently being researched)As a team the
Instrumentation Division has decided on the projects and are in the
planning process which entails design elements and costing, these
projects are of extreme importance to the Healthcare sector. This
activity is on-going activity
•Scientific assessment of low cost road sealing using Geogrit
TechnologyCoordination of research with the research assistants
from Makerere. The research involves surveying of the road,
sampling of the road materials, testing and analyzing samples in
designated government laboratories. UIRI civil engineering
department is supporting Makerere University School of Engineering
to coordinate the research is ongoing.
PS
•362 products were tested / analyzed for Microbiological, Chemical,
shelf life and quality tests
•Eshabwe product quality, shelf life testing and packaging are being
tested
•The bakery pilot plant is under commercialization through
production of bread, buns and cakes by several incubatees.

**Reasons for Variation in performance** 

N/A

Total	881,515
<b>GoU Development</b>	881,515
Donor Development	0
NTR	0

### Output: 06 51 03 Industrial Incubation

	Item	Spent
Annual Planned Outputs:	224002 General Supply of Goods and Services	393,200
To establish Essential Oil Pilot Projects.	227004 Fuel, Lubricants and Oils	40,000
To support start up value addition projects and extention of technical services to industrial enterprises. Commercialization of the UIRI bakery unit CEDARS (U) Ltd	228002 Maintenance - Vehicles	48,884
To support Edu Creations		
Procure consumables for developing educational learning materials.		
To upscale bamboo plant production of toothpick and mats at the production lines in kabale and at UIRI		
Design bamboo Product labels		
support towards sustainability and training of virtual incubatees, Create awareness for bamboo production capacity (kisoro bamboo farmers)		
Monitoring and evaluation of virtual incubatees		
Support towards sustainability & improvement of virtual incubatees' production capacity.		
Construction of a Small scale Dairy Processing Facility in Ntungamo		
To support Quality plus		
Royal Jubilee (U) Ltd (Mbale meat processing.)		
To support Gina Enterprises Kigumba.		
To support Kigezi maize millers		
Kamabale enterprizes		
Extend technical support for development of Blue Swan toiletries and		
detergent products		
Support to Nyakire mixed farm Lubumba seed/feed training centre		
Eustiniou seed, reed training contro		

### **QUARTER 2: Cumulative Outputs and Expenditure by End of Quarter**

Annual Planned Outputs and Cumulative Outputs Achieved by End of	Cumulative Expenditures made by the End of the Quarter to	
Quarter (Quantity and Location)	Deliver Cumulative Outputs U	JShs Thousand

#### Vote Function: 0651 Industrial Research

Development Projects

#### Project 0430 Uganda Industrial Research Institute

Cumulatie Outputs Achieved by the end of the Quarter:

•UIRI has continued to support Oribags Innovations as well as carry out day to day activities of handmade paper research to develop new unique products

•The Essential Oil Pilot anchor cultivation site shall be hosted at National Crop Resources Research Institute (NACRRI) Namulonge. Two other firms/farms (M/S Millionaire Gals International Limited and M/S Adeke Farm Limited) who were selected during the Design Phase will participate in the trail pilot which is aimed at collecting data, assessing the performance of Essential Oil business in Uganda and will lead to the establishment of Essential Oil Sector in Uganda. •Amagara a cosmetics incubatee attached to the Biotechnology laboratory continues to produce several product and they are supplied to a few supermarkets and beauty stores, the products continually undergo testing in the microbiology laboratory for conformity on safety and quality.

•Routine supervision, monitoring and evaluation of UIRI in-house and off-site incubates is on a continuous basis to enable them produce and deliver, quality, competitive products to the market

**Reasons for Variation in performance** N/A

Total	501,879
GoU Development	501,879
Donor Development	0
NTR	0

### Output: 06 51 04 Maintenance - Civil works

	Item	Spent
Annual Planned Outputs:	228001 Maintenance - Civil	194,460
Upgrading of storm water channel along the northern boundary		
Construction of Northern Boundary wall		
Upgrading of access road to the Eastern gate		
Upgrading of water pipeline-phase 2		
Pump house repair		
Waste water treatment Maintenance materials		
Maintenance of engineering shops		
Maintenance of electrical, water and compressed air utility machinery and		
equipment		
AC installation in TDC and Administration offices		
Remodelling Instrumentation and PCB labs		
Repair works at the bamboo plant (UIRI)		
Construction of bamboo storage shed		
Extension of the Meat Pilot plant		
Routine Pilot plant repairs		
Office space expansion		
Pilot plant cleaning materials		
Civil works renovations and modifications to Ceramics lab facility		
Civil works renovations and modifications to Chemistry Lab		
To pay retention fees for concluded contracts whose retention period has		
passed,		
Cumulatie Outputs Achieved by the end of the Quarter:		
•The design for the proposed refurbishment of the chemistry		
laboratory is under way. This will involve demolition and		
partitioning aimed at providing more working space and offices.		

Revisions have been made on original concept and new designs are

being prepared.

### **QUARTER 2: Cumulative Outputs and Expenditure by End of Quarter**

Annual Planned Outputs and Cumulative Outputs Achieved by End of	Cumulative Expenditures made by the End of the Quarter to	
Quarter (Quantity and Location)	Deliver Cumulative Outputs	UShs Thousand

#### Vote Function: 0651 Industrial Research

Development Projects

#### Project 0430 Uganda Industrial Research Institute

•Proposed refurbishment of the Meat processing Plant at UIRI. This includes Introduction of new floor tiles, improving the changing room, demolitions and installation of new doors. The refurbishment is aimed at improving the sanitary conditions of the meat facility to enable the facility attain UNBS inspection standards.Project has been changed from using the traditional of expensive contractor to use of UIRI mason.

•Internal Painting works of Dairy, Bakery, Meat Plants and external selected Buildings has been completed and for other facilities the paining works is still is ongoing.

• Cleaning of all UIRI Roof Tops is under way. Cleaning of all roof tops will remove the dust collected on the roof tops and improve on the outlook of the campus.

Arua Juice Processing plant is pending a three phase transformer and all accessories to enable a functional juice processing plant.
Supply and installation of 3 phase power supply transformer is at procurement Level. The major civil works at the plant are completed.
Blue swan Tissue production plant; Namugongo-Completion of civil works to house the tissue processing plant is scheduled for end of February 2013.

•Architectural designs for Kamambale Fruits and frozen vegetable processing plant are complete. The Bills of Quantities are being prepared.

•Renovation works have been verified for Mbale Meat Processing Plant. The civil works will include Painting, sanitary facilities and wall tiling.

•Architectural designs for the proposed water bottling plant at Bushenyi are underway.

•Remodeling of Kabale Staff House at the Potato and Bamboo processing Plant is at procurement level. The works will include construction of a staff housing, retaining wall and toilet facilities •Itojo Juice processing plant in Ntungamo District is at design stage.

#### **Reasons for Variation in performance**

N/A

194,460	Total
194,460	<b>GoU Development</b>
0	Donor Development
0	NTR

Output: 06 51 05 Maintenance - Machinery and Equipment

#### Annual Planned Outputs:

Maintenance and repair of pilot plant machinery and equipment Automation of cooling tower and supported cold-rooms To maintain machinery and equipment of On-site pilot plants, Off-site

pilot plants, analytical laboratories, engineering workshops, carpentry shop, foundry shop, textile shop, welding & fabrication shop, machining shop, electrical shop

Installation of 8 New air conditioners in newly created offices, Maintenance plumbing facilities -Assorted units like toilets, sinks and taps Maintenance electronic and electric facilities -Assorted units for lighting and power control systems

#### Cumulatie Outputs Achieved by the end of the Quarter:

•Machine servicing, rewinding and installation of the blending tank

# ItemSpent228003 Maintenance Machinery, Equipment and110,544Furniture110,544

### **QUARTER 2: Cumulative Outputs and Expenditure by End of Quarter**

Annual Planned Outputs and Cumulative Outputs Achieved by End of	Cumulative Expenditures made by the End of th	e Quarter to
Quarter (Quantity and Location)	Deliver Cumulative Outputs	UShs Thousand

#### Vote Function: 0651 Industrial Research

Development Projects

#### **Project 0430 Uganda Industrial Research Institute**

motor at Nabusanke Fruit Juice is on-going •Routine Trouble shooting of cold rooms, cip ice cream and yoghurt,

bowl cutter, chiller system, mincer machine, pasteurizer in ice cream and yoghurt, ceramics oven circuit breaker, instrumentation power has been completed

•Repair of calendaring machine, replacement of contactors in meat cold room, milk pumps reconnection replacement of part components for the juice mixer (spring and carbon brushes), has been completed •The Bowl cutter motor was rewound, replaced and the equipment assembled and it is now ready for use. Completed

•Repair works for the smokehouse and gas autoclave has been completed.

•Repairs of the glycerin autoclave are ongoing.

•Repair of the dairy cooling plant (Pump and motor replacement) is ongoing

•The Procurement process for the Mechanical engineering workshop tools and accessories under MSI has been completed, awaiting delivery, installation, training and commissioning at UIRI,

Reasons for Variation in performance

N/A

Total	110,544
GoU Development	110,544
Donor Development	0
NTR	0
GRAND TOTAL	5,979,715
Wage Recurrent	2,102,188
Non Wage Recurrent	653,090
<i>GoU Development</i>	3,224,438
Donor Development	0
NTR	0

### **QUARTER 2: Outputs and Expenditure in Quarter**

Planned and Actual Outputs in Quarter (Quantity and Location)	Expenditures incurred in the Quarter to deliver outputs UShs Thousand	
Vote Function: 0651 Industrial Research		
Recurrent Programmes		
Programme 01 Headquarters		
Outputs Provided		
Output: 06 5101 Administation		
	Item	Spent
<i>Outputs Planned in Quarter:</i> - Recruit 5 New Employees as per departmental requirements,	211102 Contract Staff Salaries (Incl. Casuals, Temporary)	1,203,030
	211103 Allowances	8,245
- Pay off current staff salaries and benefits	212101 Social Security Contributions (NSSF)	82,939
- Insure Institute Assests Equipment, Vechilles, IT Servers and IT	213001 Medical Expenses(To Employees)	18,909
Equipment	221002 Workshops and Seminars	910
	221003 Staff Training	617
- Clear Utility and property epenses	221009 Welfare and Entertainment	14,815
-Enhance communication links	221012 Small Office Equipment	5,177
-Enhance communication miks	222001 Telecommunications	14,700
-Provide General Supplies	222002 Postage and Courier	300
	223001 Property Expenses	15,097
-Meet obligations of Subcriptions and Professional Fees	223004 Guard and Security services	15,350
Actual Outputs Achieved in Quarter:	223005 Electricity	26,385
9 new employees were recruited with 8 staff leaving for various	223006 Water	15,000
reasons. Salaries for 225 staff were paid. Asset insurances, utility & property expenses were paid. Medical insurance cover was	226001 Insurances	7,768
provided for every employee and their immediate family.	227001 Travel Inland	1,489
Administrative services were rendered to the core departments of the	227002 Travel Abroad	27,800
Institute. Communication and general supplies were provided.	228002 Maintenance - Vehicles	300
Maintenance and professional services were paid for. Required	Total	1,458,831
logistics and administrative support was provided for the smooth operations of the Institute.	Wage Recurrent	1,203,030
Reasons for Variation in performance	Non Wage Recurrent	255,801
Reasons for variation in performance $N/\Delta$	NTR	0

N/A Development Projects

#### Project 0430 Uganda Industrial Research Institute

Capital Purchases

Output: 06 5172 Government Buildings and Administrative Infrastructure

#### Outputs Planned in Quarter:

Modification and reconstruction of the ceramic unit and a packaging center of excellence

#### Actual Outputs Achieved in Quarter:

Evaluation of submitted bids forModification and reconstruction of the ceramic unit and a packaging center of excellence is under way. Evaluation of submitted bids for construction of the Southern Boundary perimeter wall and drainage channel

Reasons for Variation in performance

N/A

Total	0
GoU Development	0
Donor Development	0
NTR	0

Output: 06 5176 Purchase of Office and ICT Equipment, including Software

### **QUARTER 2: Outputs and Expenditure in Quarter**

Planned and Actual Outputs in Quarter Quantity and Location) Expenditures incurred in the Quarter to de		er outputs UShs Thousand
Vote Function: 0651 Industrial Research		
Development Projects		
Project 0430 Uganda Industrial Research Institute		
	Item	Spen
Outputs Planned in Quarter:	231005 Machinery and Equipment	28
ICT training & certification Procurement of ICT Back up system. Procurement and installation ICT Hardware and Software maintenance Internet hosting services		
Actual Outputs Achieved in Quarter:		
ICT training & certification Procurement of ICT Back up system was completed Routine ICT Hardware and Software maintenance was carried out Internet hosting services continue to be offered		
Reasons for Variation in performance		
N/A		
	Total	289
	GoU Development Donor Development	289 0
	NTR	0
Output: 06 5177 Purchase of Specialised Machinery & Equipment		
	Item	Spen
Outputs Planned in Quarter:	231005 Machinery and Equipment	512,54
-Foundry shop II -One complete line for the melting shop, UIRI Campus		
-Surface treatment/Heat treatment unit-Complete machinery & equipment for treatment of materials, UIRI Campus -Instrumentation -Key machinery & equipment for instrumentation, UIRI Campus		
-One cereal agro-processing partner venture supported at Kabale		
-One cranberry fruit processing unit set up in Pader		
-One Fruit pulp extraction equipment to be set upcountry		
-One production line for NCD vaccine set up at UIRI unit		
-Two virtual incubation meat processing equipment for centers Kabale and Soroti		
- ICT equipment for all departments		
Actual Outputs Achieved in Quarter:		
<ul> <li>The Briquette Processing technology has procured and delivered. The technology is aimed at promoting energy efficiency and sustainable biomass use. This awaits installation, training and commissioning in Kabale.</li> <li>Stainless steel floor grating have been fabricated and fixed as trench gratings in the dairy, juice and meat pilots plants</li> </ul>		
Reasons for Variation in performance		
N/A		
	Total	512,546
	GoU Development	512,546
	Donor Development	0

NTR

0

### **QUARTER 2: Outputs and Expenditure in Quarter**

Planned and Actual Outputs in Quarter	Expenditures incurred in the Quarter to deliver outputs	
(Quantity and Location)	UShs Thousand	
Vote Function: 0651 Industrial Research		

Development Projects

**Project 0430 Uganda Industrial Research Institute** Outputs Provided

Output: 06 5102 Research and Development

#### **Outputs Planned in Quarter:**

To replicate 4 food processing equipments. To pilot one unit of Timber Kiln/Seasoning technology as its Phase I has already been constructed, to pilot one Solid adsorption technology (zeolites) that has been developed. To produce five thousand products from recycled materials and fibers. To source production (Ingredients and Packaging) materials for the UIRI Fruit juice plant. To carry out twenty microbial analyses. To develop and pilot five ceramic products. To continue with production, commercialization and awareness campaigns of the Newcastle Disease Vaccines produced by UIRI vaccine unit. To continue with research and development for the improvement of fish and vegetable sausages. Formulation of five dairy products and further development of meat, bakery and bamboo safety processing and production procedures.

#### Actual Outputs Achieved in Quarter:

Following the completion of the Design Phase (Phase I) to Establishing an Essential Oil Pilot Project in Uganda. The Establishment Phase (Phase II) commenced with training of two UIRI technical staff conducted and hosted at the CSIR. Procurements of Plant Material, distillation unit, organic certification weed mat, are under the guidance of CSIR are underway. A Memorandum of Understanding is being finalized between UIRI and National Crop Resource Research Institute (NaCRRI) where the pilot will be hosted.
18 samples were received or collected from both external and internal clients for chemical analysis and characterization. Analysis certificates were issued.

•2 interns trained in basic laboratory practices and analysis •Research on application of zeolytes in waste water treatment and Processing of xanthan gum from cassava is ongoing.

•Under product development different food product recipes have been developed and standardized. 30 milkshake samples have been developed (10 pineapple flavor, 10 mango flavor and 10 passion flavor.) The milk shake is undergoing shelf life study and full scale production will be undertaken as soon as possible. •Various jams and pastes have been developed

•Producing fruit toffee is under way,

•Wine still under fermentation and maturity

Prototypes for product formulations for handmade paper have been developed. Several paper products were produced like bags, beads, cards. Continue to work with the Incubatee oribags innovations as well as carry out day to day activities of developing products
70 samples were tested for Microbial safety in food, water, beverages and cosmetic products. These were both for internal and external clients

•Research on Pre & Post Harvest Technique of Shea Butter and Shea Butter Oil is ongoing.

•Nabusanke Fruit Juice Processing Project-Kayabwe: Formulation of Splendid-Orange fruit drink for scale-up has been finalized.25 cartons of 300ml RTD orange fruit drink and 38 cartons of 500ml RTD orange fruit drinkwere produced.

•Formulation for scale up of Splendid-Pineapple Fruit drink is underway

•The Ceramic /Material and Minerals Engineering Unit developed 5

# Item Spent 224002 General Supply of Goods and Services 356,028 226001 Insurances 17,963

### **QUARTER 2: Outputs and Expenditure in Quarter**

Planned and Actual Outputs in Quarter	Expenditures incurred in the Quarter to deliver outputs
(Quantity and Location)	UShs Thousand
Vote Function: 0651 Industrial Research	

Development Projects

#### Project 0430 Uganda Industrial Research Institute

flower vases, 20 ceramic artificial corals and analyzed 230 samples •Development of different products like flower vases, Ceramic artificial corals; and analysis of samples for body formulations is ongoing.

•Research on Gem/stone cutting technology, ceramic artificial corals, ceramic buttons, ceramic water filters, bentonite anti-acne powder and school chalk is ongoing.

•Kabale Potato Processing Plant: 6.835 tonnes of raw material (Potato) were processed into 6,672 packs of Emondi and supplied to various supermarkets for sale.Continued production of Potato crisps has provided an assured ready market for farmers and in effect increasing their household incomes. Continued production of potato crisps is also aimed at increasing level of output, training Production team on Safety and Product quality improvement, putting into place all the corrective actions required for UNBS audit and Certification. •Lira Peanut Research and Processing Centre: Acquired the UNBS Quality mark as well as certification. Developed peanut products with a brand name GRANDY. 612 jars of Grandy Peanut butter (Crunchy) and 1000 jars of Grandy Peanut Butter (smooth) were produced. Research on value addition to Peanuts so as to break the monotony of plain ordinary peanut butter that is available on the market is ongoing.

•Research on mushroom aimed at domesticating a local mushroom variety-Agaricus (Button Mushroom) is ongoing. TDC

• One complete and functional line of a 300kg capacity essential oils biomass distiller was successfully designed and fabricated. The Essential oils distilling unitis to be operational and used as mobile oil extractor. Pilot testing of the oil distiller is on-going

•The Energy Systems department at UIRI has designed an improved solar dryer prototype system. The improved solar dryer will help in increasing the shelf life of agricultural products as well as adding value. Its adoption by the farmers will boost their incomes as well as improving food security. Commencement of its construction awaits the relevant materials.

•A stove that uses stones as fuel and generates electricity is under design and development. The Physical and chemical analysis of the stones to be used as fuel is underway. The stove will help in providing electricity for domestic uses like lighting a bulb, charging a phone; it will also provide cooking needs of the people especially in rural areas. A sample of the stones has sent to South Africa for further analysis. Design and construction of some parts of the stove is underway •Projects with International Collaborators, LEED at Boston University, USA, Oxford BioHorizons Ltd, UK and UNECADesign of Solar Powered Pulse Oximeter with Boston University and Glucometer with Oxford BioHorizons for UNECA Healthcare Technology Competition ( projects were decided on and techincal design elements currently being researched)As a team the Instrumentation Division has decided on the projects and are in the planning process which entails design elements and costing, these projects are of extreme importance to the Healthcare sector. This activity is on-going activity

•Scientific assessment of low cost road sealing using Geogrit TechnologyCoordination of research with the research assistants from Makerere. The research involves surveying of the road, sampling of the road materials, testing and analyzing samples in designated government laboratories. UIRI civil engineering department is supporting Makerere University School of Engineering to coordinate the research is ongoing. PS

### **QUARTER 2: Outputs and Expenditure in Quarter**

Planned and Actual Outputs in Quarter (Quantity and Location)	Expenditures incurred in the Quarter to delive	er outputs UShs Thousand
Vote Function: 0651 Industrial Research		
Development Projects		
Project 0430 Uganda Industrial Research Institute		
<ul> <li>•362 products were tested / analyzed for Microbiological, Chemical, shelf life and quality tests</li> <li>•Eshabwe product quality, shelf life testing and packaging are being tested</li> <li>•The bakery pilot plant is under commercialization through production of bread, buns and cakes by several incubatees.</li> </ul>		
Reasons for Variation in performance		
N/A		
	Total	373,991
	GoU Development	373,991
	Donor Development	0
	NTR	0
Output: 06 51 03 Industrial Incubation		
	Item	Spent
Outputs Planned in Quarter:	224002 General Supply of Goods and Services	162,797
-Establishing one dairy incubation centre in Ntungamo -Monitoring and evaluation of virtual incubatees -Consumables for the bamboo plant	227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	40,000 21,630
-Support towards sustanability & improvement of virtual incubatees' production capacity -Value addition and technology transfer projects under the office of the President flagship projects		
Actual Outputs Achieved in Quarter:		
<ul> <li>•UIRI has continued to support Oribags Innovations as well as carry out day to day activities of handmade paper research to develop new unique products</li> <li>•The Essential Oil Pilot anchor cultivation site shall be hosted at National Crop Resources Research Institute (NACRRI) Namulonge. Two other firms/farms (M/S Millionaire Gals International Limited and M/S Adeke Farm Limited) who were selected during the Design Phase will participate in the trail pilot which is aimed at collecting data, assessing the performance of Essential Oil business in Uganda and will lead to the establishment of Essential Oil Sector in Uganda.</li> <li>•Amagara a cosmetics incubatee attached to the Biotechnology laboratory continues to produce several product and they are supplied to a few supermarkets and beauty stores, the products continually undergo testing in the microbiology laboratory for conformity on safety and quality.</li> <li>•Routine supervision, monitoring and evaluation of UIRI in-house and off-site incubates is on a continuous basis to enable them produce and deliver, quality, competitive products to the market</li> </ul>		
N/A		
	Total	224,428
	GoU Development	224,428
	Donor Development	0
	NTR	0

Output: 06 51 04 Maintenance - Civil works

### **QUARTER 2: Outputs and Expenditure in Quarter**

lanned and Actual Outputs in Quarter Quantity and Location)	Expenditures incurred in the Quarter	• to deliver outputs UShs Thousand
Vote Function: 0651 Industrial Research		
Development Projects		
Project 0430 Uganda Industrial Research Institute		
<i>y</i> 0	Item	Spen
Outputs Planned in Quarter:	228001 Maintenance - Civil	135,459
-Pilot plant repairs -Retention amount for previous works -General and minor repairs of small civiil works and repairs to some of the water installations that may not be foreseen as of now Construction of Food Packaging Center and Renovation of Ceramics pilot plant		
Actual Outputs Achieved in Quarter:		
<ul> <li>The design for the proposed refurbishment of the chemistry laboratory is under way. This will involve demolition and partitioning aimed at providing more working space and offices. Revisions have been made on original concept and new designs are being prepared.</li> <li>Proposed refurbishment of the Meat processing Plant at UIRI. This includes Introduction of new floor tiles, improving the changing room, demolitions and installation of new doors. The refurbishment is aimed at improving the sanitary conditions of the meat facility to enable the facility attain UNBS inspection standards.Project has been changed from using the traditional of expensive contractor to use of UIRI mason.</li> <li>Internal Painting works of Dairy, Bakery, Meat Plants and external selected Buildings has been completed and for other facilities the paining works is still is ongoing.</li> <li>Cleaning of all UIRI Roof Tops is under way. Cleaning of all roof tops will remove the dust collected on the roof tops and improve on the outlook of the campus.</li> <li>Arua Juice Processing plant is pending a three phase transformer and all accessories to enable a functional juice processing plant. Supply and installation of 3 phase power supply transformer is at procurement Level. The major civil works at the plant are completed.</li> <li>Bue swan Tissue production plant; Namugongo-Completion of civil works to house the tissue processing plant is scheduled for end of February 2013.</li> <li>Architectural designs for Kamambale Fruits and frozen vegetable processing plant are complete. The Bills of Quantities are being prepared.</li> <li>Architectural designs for the proposed water bottling plant at Bushenyi are underway.</li> <li>Remodeling of Kabale Staff House at the Potato and Bamboo processing Plant is at procurement level. The works will include construction of a staff housing, retaining wall and toilet facilities</li> <li>Itoio Juice processing plant in Ntungamo District is at design stage.</li> </ul>		
Pagoons for Variation in parformance		
Reasons for Variation in performance		

Total	135,459
GoU Development	135,459
Donor Development	0
NTR	0

Output: 06 51 05 Maintenance - Machinery and Equipment

### **QUARTER 2: Outputs and Expenditure in Quarter**

Planned and Actual Outputs in Quarter (Quantity and Location)	Expenditures incurred in the Quarter to delive	r outputs UShs Thousand
Vote Function: 0651 Industrial Research		05h3 Thousand
Development Projects		
Project 0430 Uganda Industrial Research Institute		
1 Tojeci 0450 Ogunuu Indusiriai Kesearch Institute	τ,	C
Outputs Planned in Quarter:	Item	<b>Spen</b> 36,75
	228003 Maintenance Machinery, Equipment and Furniture	50,75
-On-Site Pilot Plants- Maintenance of paper plant, meat plant, dairy plant, bakery plant, fruits & vegetables plants, ceramics plant, bamboo plants &	i uniture	
on-site incubator facilities		
-Off-Site Pilot Plants-Maintenance of equipment in Kabale, Busia,		
Nabusanke, Arua, Lira -Analytical Laboratories- Maintenance of Microbiology, chemistry,		
biotechnology & vaccine facilities		
- Engineering Workshops-Maintenance of carpentry shop, foundry shop,		
textile shop, welding & fabrication shop, machining shop, electrical shop		
-Maintenance of sewerage system Phase II of overhauling the Sewerage system at UIRI Campus		
Actual Outputs Achieved in Quarter:		
<ul> <li>Machine servicing, rewinding and installation of the blending tank motor at Nabusanke Fruit Juice is on-going</li> <li>Routine Trouble shooting of cold rooms, cip ice cream and yoghurt, bowl cutter, chiller system, mincer machine, pasteurizer in ice cream and yoghurt, ceramics oven circuit breaker, instrumentation power has been completed</li> <li>Repair of calendaring machine, replacement of contactors in meat cold room, milk pumps reconnection replacement of part components for the juice mixer (spring and carbon brushes), has been completed</li> <li>The Bowl cutter motor was rewound, replaced and the equipment assembled and it is now ready for use. Completed</li> <li>Repair works for the smokehouse and gas autoclave has been completed.</li> <li>Repairs of the glycerin autoclave are ongoing.</li> <li>Repair of the dairy cooling plant (Pump and motor replacement) is ongoing</li> </ul>		
•The Procurement process for the Mechanical engineering workshop		
tools and accessories under MSI has been completed, awaiting delivery, installation, training and commissioning at UIRI,		

N/A

Total	36,756
GoU Development	36,756
Donor Development	0
NTR	0
GRAND TOTAL	2,742,300
Wage Recurrent	1,203,030
Non Wage Recurrent	255,801
GoU Development	1,283,469
Donor Development	0
NTR	0

### **QUARTER 3: Revised Workplan**

Planned Outputs for the Quarter (Quantity and Location)	Estimated Funds Available in Quarter (from balance brought forward and actual/exp	ected releaes)		UShs Thousand
Vote Function: 0651 Industrial Resear	rch			
Recurrent Programmes				
Programme 01 Headquarters				
Outputs Provided				
Output: 06 5101 Administation and Support	Services			
Output. 003101 Auministation and Support	Item	Balance b/f	New Funds	Tota
	211102 Contract Staff Salaries (Incl. Casuals, Temporary)	11,527	0	11,527
- Recruit 5 New Employees as per departmental requirements,	212101 Social Security Contributions (NSSF)	18,811	0	18,811
departmental requirements,	213001 Medical Expenses(To Employees)	30,750	0	30,750
- Pay off current staff salaries and benefits	221001 Advertising and Public Relations	5,496	0	5,496
	221002 Workshops and Seminars	1,290	0	1,290
- Insure Institute Assests Equipment, Vechilles, IT Servers and IT Equipment	221003 Staff Training	243	0	243
II beivels and II Equipment	221004 Recruitment Expenses	500	0	500
- Clear Utility and property epenses	221009 Welfare and Entertainment	2,327	0	2,327
Enhance communication links	221011 Printing, Stationery, Photocopying and Binding	1,754	0	1,754
-Enhance communication links	221012 Small Office Equipment	1,435	0	1,435
-Provide General Supplies	221017 Subscriptions	764	0	764
	222001 Telecommunications	2,550	0	2,550
-Meet obligations of Subcriptions and	222002 Postage and Courier	601	0	601
Professional Fees	222003 Information and Communications Technology	9,241	0	9,241
	223001 Property Expenses	753	0	753
	226001 Insurances	2,215	0	2,215
	227001 Travel Inland	262	0	262
	227003 Carriage, Haulage, Freight and Transport Hire	2,585	0	2,585
	228002 Maintenance - Vehicles	313	0	313
	Total	88,689	0	88,689
	Wage Recurrent	11,527	0	11,527
	Non Wage Recurrent	77,162	0	77,162
	NTR	0	0	0
Development Projects				
Project 0430 Uganda Industrial Resea	rch Institute			
Capital Purchases				
Output: 06 5172 Government Buildings and A	Administrative Infrastructure			
r C	Item	Balance b/f	New Funds	Tota
Modification and reconstruction of the ceramic unit and a packaging center of excellence	231001 Non-Residential Buildings	116,644	0	116,644
······································	Total	116,644	0	116,644
	<b>GoU Development</b>	116,644	0	116,644
	Donor Development	0	0	0
	NTR	0	0	0
Output: 06 5176 Purchase of Office and ICT	Equipment, including Software			
-	Item	Balance b/f	New Funds	Tota
ICT training & certification Procurement of ICT Back up system.	231005 Machinery and Equipment	33,868	0	33,868
Procurement and installation	Total	33,868	0	33,868
ICT Hardware and Software maintenance	GoU Development	33,868	0	33,868
Internet hosting services	Donor Development	0	0	0

0

NTR

0

0

Planned Outputs for the Quarter (Quantity and Location)	Estimated Funds Available in Quarter (from balance brought forward and actual/exp	ected releaes)		UShs Thousand
Vote Function: 0651 Industrial Resear	rch			
Development Projects				
Project 0430 Uganda Industrial Resea	rch Institute			
Output: 06 51 77 Purchase of Specialised Mac	hinery & Equipment			
	Item	Balance b/f	New Funds	Tota
-Motor rewinding shop - Complete machinery & equipment for rewinding shop, UIRI Campus	231005 Machinery and Equipment	234,485	0	234,485
	Total	234,485	0	234,485
-Plumbing unit -Complete machinery & equipment for plumbing, UIRI Campus	GoU Development	234,485	0	234,485
equipment for plumbing, UIRI Campus	Donor Development	0	0	0
-Energy Systems - Key machinery & equipment for energy systems, UIRI Campus				
-Textile & crafts shop II - Complete phase II machinery for textile & crafts line, UIRI campus.				
-One cereal agro-processing partner venture supported at Kabale				
-One microbiology lab at UIRI equipped-phase I				
-One Fruit pulp extraction center set upcountry				
-One fruit juice line augemented at UIRI unit				
- ICT equipment for all departments.				

NTR 0 0 0 **Outputs** Provided Output: 06 5102 Research and Development Item Balance b/f New Funds Total 17,503 17,503 222003 Information and Communications Technology 0 To produce and pilot one functional unit for 36,250 36,250 223005 Electricity 0 edible oils production through Edible Oil extraction technology. To construct the Green 224002 General Supply of Goods and Services 83,132 0 83,132 roof( one unit of Solar roof top piloted) at UIRI. 226001 Insurances 14,120 0 14,120 To develop one Electrical Equipment. To 151,005 Total 151.005 0 produce five thousand products from recycled **GoU Development** 151,005 0 151,005 materials and fibers. To source production materials for Lira, Nabusanke, and Kabale 0 **Donor Development** 0 0 projects. To carry out twenty microbial analyses. To develop and pilot five ceramic products. To characterize fifty samples and validate one analytical chemical method. To continue with production, commercialization and awareness campaigns of the Newcastle Disease Vaccines produced by UIRI vaccine unit. To continue with research and development for the improvement of fish and vegetable sausages. Formulation of five dairy products and further development of meat, bakery and bamboo safety processing and production procedures.

NTR

0

0

0

<b>QUARTER 3:</b>	Revised	Workplan
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-	ected releaes)	Ľ	JShs Thousand
rch			
rch Institute			
Incubation			
Item	Balance b/f	New Funds	Tota
221003 Staff Training	15,482	0	15,482
224002 General Supply of Goods and Services		0	89,898
	45,745	0	45,745
		0	34,174
Total	185,298	0	185,298
GoU Development	185,298	0	185,298
Donor Development	0	0	0
NTR	0	0	0
re Establishment			
Item	Balance b/f	New Funds	Tota
228001 Maintenance - Civil	75,846	0	75,846
			75,846
-	75,846	0	75,846
Donor Development	0	0	0
NTR	0	0	0
ance	<b>D.I.</b> 1/4		
	v		Tota
228003 Maintenance Machinery, Equipment and Furniture	79,250	0	79,250
	<b>70 35</b> 0	Δ	70.250
	,		79,250
•			79,250
Donor Development	0	0	0
NTR	0	0	0
			0
	rch Institute Incubation Item 221003 Staff Training 224002 General Supply of Goods and Services 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles Total GoU Development Donor Development Item 228001 Maintenance - Civil Total GoU Development Donor Development Donor Development Donor Development NTR	(from balance brought forward and actual/expected release)         rch         Institute         Incubation         Item       Balance b/f         21003 Staff Training       15,482         224002 General Supply of Goods and Services       89,898         227004 Fuel, Labricants and Oils       45,745         28002 Maintenance - Vehicles       34,174         Total       185,298         GoU Development       185,298         Donor Development       0         re Establishment       185,298         Item       Balance b/f         228001 Maintenance - Civil       75,846         GoU Development       75,846         Donor Development       0         NTR       0         re Establishment       0         Item       228001 Maintenance - Civil       75,846         GoU Development       75,846         Donor Development       0         NTR       0         staff       79,250         GoU Development       79,250         GoU Development       79,250         GoU Development       79,250         GoU Development       0	(from balance brought forward and actual/expected releaes)         rch Institute         Incubation       Balance b/f       New Funds         221003 Staff Training       15,482       0         220002 General Supply of Goods and Services       89,898       0         22004 Fuel, Lubricants and Oils       45,745       0         22002 Maintenance - Vehicles       34,174       0         GoU Development       185,298       0         GoU Development       185,298       0         Donor Development       0       0         restablishment       Balance b/f       New Funds         Item       Balance b/f       New Funds         228001 Maintenance - Civil       75,846       0         GoU Development       75,846       0         Donor Development       0       0         Item       Balance b/f       New Funds         228001 Maintenance - Civil       75,846       0         Donor Development       0       0       0         Item       Balance b/f       New Funds       0         228003 Maintenance Machinery, Equipment and Furniture       79,250       0       0         GoU Development       79,250       0<

### **QUARTER 3: Revised Workplan**

Planned Outputs for the Quarter (Quantity and Location)	Estimated Funds Available in Quarter (from balance brought forward and actual/expe	cted releaes)	L	Shs Thousand
	GRAND TOTAL	965,085	0	965,085
	Wage Recurrent	11,527	0	11,527
	Non Wage Recurrent	77,162	0	77,162
	GoU Development	876,396	0	876,396
	Donor Development	0	0	0
	NTR	0	0	0

### **QUARTER 4: Revised Cashflow Plan**

Non-Wage Recurrent

	Annual budget			Q4 Cash	Requirement	
		end of Q3	Released	Total	% Budget	
PAF	0	0	0.0%	0	0.0%	
Statutory	0	0	0.0%	0	0.0%	
Other	1.540250584	4.287649734	278.4%	0	0.0%	
Total	1.540250584	4.287649734	278.4%	0	0.0%	

Reasons for cash requirement greater than 1/4 of the budget:

#### **GoU Development**

	Annual budget	Release to	0		Requirement	
		end of Q3	Released	Total	% Budget	
PAF	0	0	0.0%	0	0.0%	
Other	7.03	6.444166666	91.7%	0	0.0%	
Total	7.03	6.444166666	91.7%	0	0.0%	

Reasons for cash requirement greater than 1/4 of the budget:

#### **Grand Total**

					Requirement	
		end of Q3	Released	Total	% Budget	
Grand Total	8.570250584	10.7318164	125.2%	0	0.0%	

### **Checklist for OBT Submissions made during QUARTER 3**

This is an automated checklist which shows whether data has been entered into the areas which are required for a complete quarterly submission. It does not verify the quality of the data that has been entered. A complete checklist is therefore a necessary, but not sufficient condition for a satisfactory submission to MoFPED.

### **Project and Programme Quarterly Performance Reports and Workplans (Step 2)**

The table below shows whether output information, and where relevant donor and ntr data has been entered into the required areas for the quarterly performance reports and quarterly workplans under step 2.

### **Output Information**

Vote Function, Project and Program	Q2 Report	Q3 Workplan
0651 Industrial Research		
• Recurrent Programmes		
- 01 Headquarters	Data In	Data In
• Development Projects		
- 0430 Uganda Industrial Research Institute	Data In	Data In
o is o Chanda Industrial Resolution Institute	2	s and m

### **Donor Releases and Expenditure**

NTR Relea	ises and Expenditure		
Vote Funct	tion, Project and Program	Q2	Q3
		Report	Workplan
0651 Indu	strial Research		
• Recurren	t Programmes		
- 01	Headquarters	Data In	Data In

### Vote Performance Summary (Step 3)

...

The table below shows whether information has been entered into the required fields in the vote performance summary tables for each vote functions under step 3.1:

Vote Function	Perf. Indicators	Output Summary	Actions
0651 Industrial Research	Data In	Data In	Data In

The table below shows whether data has been entered in the fields for key variances in budget execution under step 3.2:

Type of variance	Prog's Projects	Items / Inputs	Outputs		
Unspent Balances	Data In	Data In	Data In		
Over expenditure vs budget	Data In	Data In	Data In		
The table below shows whether data has been entered into the vote narrative fields under step 3.3:					
			Narrative		
Narrative			Data In		

Narrative

### Quarterly Cash Requests (Step 4)

**Cash Request** 

Data In

# Vote: 110 Uganda Industrial Research Institute

### **Checklist for OBT Submissions made during QUARTER 3**

The table below shows whether data has been entered into the cash request under step 4:

Cash Request