

ORIC 5 Year Strategic Plan (2023-2027)



**Office of the Research, Innovation
and Commercialization
University of Swat**

1. EXECUTIVE SUMMARY:

University of Swat was established for providing higher education to the people of Swat Valley specifically and the whole of the country generally. It was established in the year 2010 with the aim to impart quality and relevant education. This mission was launched with enthusiasm and patience with very meager resources in-hand. The university has 35 degree programs with 6031 students and 132 faculty members. Academic and administrative staff is striving hard in order to provide quality education to the students and to uplift the university to an exemplary stage. The University faculty members/researchers are working in diverse areas related to natural, basic, applied and social sciences. The faculty members from various departments have completed 13 competitive research projects in the last 3 years. These projects were related to ecological footprint, Work Environment, DNA-based Prediction of Eye and Hair Colour, Fuzzy Soft Ideals, begomovirus-complex and its whitefly vector, Organizational Commitment, DNA Barcoding and phylogenetic analysis, conservation of *taxuscontorta*, Biological Control Strategies, Molecular Identification and Characterization, News Web Archive, Environmental Friendly, Mg-Matrix and Growing and carbon stock assessment of coniferous forest.

Keeping in view the research potentials and in the wake of promoting research endeavors and synchronizing it with academic norms and industrial demands, the University of Swat has established Office of Research, Innovation and commercialization (ORIC) on the directives of Higher Education Commission and initiative of the honorable Vice Chancellor, University of Swat. ORIC is aimed at promoting quality research with innovation, creativity, skills development, commercialization and intellectual property that will eventually benefit the country's economy in general and university in particular.

The mandate of ORIC is to strengthen the research activities and provide services for matters pertaining to research and development through invention, innovation, commercialization of products, patents, collaboration and arranging seminars, conferences and workshops. Moreover, this ORIC Office will strive to contribute significantly in improving the national and international ranking through quality research work and publications besides filing of applied patents. With this background, the ORIC in University of Swat aims:

- To establish ORIC office, University of Swat keeping in view the guidelines of Higher Education Commission.
- To hunt research projects announced from time to time by national and international donors having local and national importance.
- To mobilize research resources followed by facilitating and coordinating research projects.
- To develop linkages/MoUs with local & international organizations.
- To keep liaison with prospective industries and corporate sector for commercialization of research and placement of internees
- To advance commercialization of University's research & revenue generation while protecting Intellectual Property rights
- To promote research culture and research related activities such as trainings, seminars, workshops and conferences etc.

2. VISION:

To be the best in research excellence and its market utility by fully exploiting the available research resources

3. MISSION:

To promote and strengthen the existing research culture in University of Swat by promoting quality research, strengthening university-industry linkages and visibility in the policy circles.

4. GOALS:

To be a national leader in Research, Innovation and Commercialization of products at par with the international standards.

4.1 Short, Medium and Long Term Goals

Short term Goals	Medium term Goals	Long term goals
<ul style="list-style-type: none"> • Providing professional development opportunities to equip all researchers with the skills needed to undertake rigorous research with a view to impactful outcomes. • Encourage interdisciplinary research to make it more innovative and impactful. • Encouraging researchers to conduct research on priority themes having local, national and international importance. • Improving research grant process on the part of University of Swat to encourage hunting competitive funding proposals. • Encouraging and recognize the role of 	<ul style="list-style-type: none"> • Providing research facilities and infrastructure of the highest quality, embedding this priority within the University's development plan. • Promoting activities that communicate our research strengths and successes in engagement with the wider public and policy circles. • Providing excellent research support appropriate for the needs of individual researchers across the disciplines and promote their career development. • Provide training for both students and supervisors, as appropriate, to ensure a culture of research excellence and integrity. 	<ul style="list-style-type: none"> • Ensuring the utilization of allocated resources to meet the highest standards of research quality and integrity. • Encouraging healthy research, innovation and commercialization among the researchers in the University of Swat. • Disseminating research output among the key stakeholders to increase the visibility of the University of Swat. • Maintaining a strong commitment to the link between research and teaching and continue to expect that the majority of academic staff will undertake both activities. • Encourage

<p>research students in promoting the research ambitions of the University and integrate them more effectively into the research culture of the institution.</p>	<ul style="list-style-type: none"> • Increase Graduate research student numbers while maintaining the highest academic quality. 	<p>researchers to register their innovations followed their commercialization for further research income generation. This will diversify the portfolio of research income, particularly from industry and other public and private sources.</p> <ul style="list-style-type: none"> • Developing partnerships at the national and international level that support the University's research ambitions and the development of long-term sustainable relationships.
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Values, Competitive Advantage and Information on Leadership

The ORIC in University of Swat progressed well in terms of collaborating with national and international organizations to develop the research culture. The University of Swat through ORIC signed 19MoUs with national and international organizations while other 5 are in process. The external partner organizations are well established and have good track record which will strengthen both academic and research activities in University of Swat.

The ORIC in University of Swat also believe on the diverse and inclusive research environment in the University which will help both the researchers and faculty members. It tries to make the research more impactful and result oriented to help policy makers to have informed decisions. Our office is trying to catch and share new opportunities among the researchers and approach entrepreneurs to work in collaboration in the best interest of our students and researchers. We are trying our best to facilitate researchers and students on the entrepreneurial, internships and scholarships opportunities.

District swat is blessed with vast natural resources with many job opportunities. The local youth can be employed in key sectors such as tourism, mining, forests, fishery, marbles etc. The ORIC in University of Swat champion in guiding and preparing the local youth/graduates to contribute to these sectors through effective entrepreneurship. The ORIC also tries to develop healthy competition among the students to catch small and medium scale job opportunities.


In terms of research tangible outcome, the income generated from research projects and patents registered in the future will further strengthen the research culture in the University of Swat. The University of Swat has geographical advantage to conduct research on cross cutting local issues. Moreover, the dissemination of research output including project report, scholarly research articles, policy briefs etc. will increase the visibility of the University of Swat in the circles of academicians, researchers, industry and policy makers.

Roles and Responsibilities of ORIC

- Ensure that research proposals are submitted as per the donor requirements and in accordance with the University rules
- Ensure that research proposals submitted are evaluated/reviewed by the Ethical Institutional Review Board constituted by the University
- Ensure that expenditures of research project awarded are made in accordance with the University rules.
- Support and guide researchers on the format of research proposals, project reports, expenditures statements etc
- Organize the workshops/seminars for the faculty on various research, commercialization and innovation related issues.

- To support and develop collaborations with national and international organizations to promote research
- To help researchers in disseminating their research output with key relevant stakeholders

Services at ORIC

- Disseminate the funding opportunities among the researchers/faculty in the University of Swat
 - Facilitate the interns to work in various organizations/departments
 - To facilitate PIs to work with other researchers and develop consortiums
 - Supporting and processing MoUs with national and international organizations
 - Guiding the students of the University of Swat on various job opportunities
 - The ORIC office share the updates on the social media and website of the University
 - Developing dataset on the research, Innovation and commercialization related indicators
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5. KEY RESULT AREAS & KEY PERFORMANCE INDICATORS

KRAs	KPIs	Baseline	Five Years Targets				
		2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
A. Research Excellence							
Research Grant Management	i. Competitive Research Grant Opportunities Identified and Circulated to Faculty / Researchers (National or International)	5	20	40	45	50	65
	ii. Number of Research Proposals Submitted for Funding by HEC (Proposals Submitted to PhD Faculty Ratio)	28/77 = 0.36	0.40	0.45	0.50	0.55	0.65
	iii. Research Proposals Approved for Funding by HEC (Proposals Acceptance Ratio)	11/28 = 0.39	0.45	0.50	0.55	0.65	0.70
	iv. Number of Research Projects (won through HEC) Completed (which were due to be completed this year)	5	10	15	20	25	30
	v. Number of Research Proposals Submitted for Funding (from non HEC source - National or International) - (Proposals Submitted to PhD Faculty Ratio)	18/77 = 0.23	0.28	0.33	0.37	0.42	0.47
	vi. Research Proposals Approved for Funding (from non HEC source - National or International) - (Proposals Acceptance Ratio)	0/18 = 0	5	10	15	20	25
	vii. Number of Research Projects Completed (won through non-HEC source - National or International) (which were due to be	1	5	10	15	20	25

	completed)						
	viii. Joint Research Projects Approved for Funding (National / International Funding Agencies) - (Proposals Acceptance Ratio)	2/28 = 0.07	0.10	0.15	0.20	0.25	0.30
	ix. Volume of R&D Funding Secured: National (HEC, Ignite, PSF, MOST, Joint Research Projects & others from federal or provincial government) / International	1	3	5	7	9	15
	x. Number of Research Proposals / Joint Research Proposals Reviewed by IRB, before Submission to Funding Bodies (HEC, Ignite, PSF, MOST & others from federal or provincial government) / International	4	15	25	35	45	50
	xi. Number of Policy Advocacy or Case Studies Presented to Government Departments - (Policy Advocacy or Case Studies Submitted to PhD Faculty Ratio)	0/77	2	5	10	15	20
	i. Number of Research Links established with other HEIs / Corporate Sector / Industry / Community (National / International) - (Research Links Established to PhD Faculty Ratio)	27	30	35	40	45	50
	ii. Number of Contract Research Awarded by Industry or Government Organizations (National) - (Contract	0/77 = 0	2	5	8	12	15

Research Linkages, Coordination & Networks	Research Awarded to PhD Faculty Ratio)						
	iii. Number of Contract Research Awarded by Industry or Government Organizations (International) - (Contract Research Awarded to PhD Faculty Ratio)	0/77 = 0	2	5	8	10	15
	iv. Volume of Contract Research Awarded by Industry or Government Organization (National or International)	0	1	2	4	5	8
	v. Number of Civic Engagement Events / Initiatives on Issues of Public Concern	7	10	15	20	25	30
	vi. Consultancy Opportunities Identified and Circulated to Faculty / Researchers	0	1	2	5	8	12
	vii. Consultancy Contracts Executed through ORIC with Industry, Commerce or Government etc. - (Consultancy Contracts Executed to PhD Faculty Ratio)	0	1	2	5	8	12
	viii. Liaison Developed with University's Advance Studies & Research Board (AS&RB)	0	1	2	3	4	5
	B. Innovation & Commercialization						
Research & IP Legislation	i. Research Policy of the HEI	Yes	✓	✓	✓	✓	✓
	ii. Intellectual Property Rights Policy of the HEI	Yes	✓	✓	✓	✓	✓
	iii. Research Ethics Policy / Technology Transfer Policy / Research Conflict of Interest Policy / etc.	Yes	✓	✓	✓	✓	✓
	i. Number of IP Licensing	0	1	2	3	4	5

Commercialization & IP Licensing	Negotiations Initiated (at National Level) - (IP Negotiations Made to PhD Faculty Ratio)						
	ii. Number of Non-Exclusive or Exclusive Licenses Signed (at National Level)	0	1	2	3	4	5
	iii. Number of IP Licensing Negotiations Initiated (at International Level) - (IP Negotiations Made to PhD Faculty Ratio)	0	1	2	3	4	5
	iv. Number of Non-Exclusive or Exclusive Licenses Signed (at International Level)	0	1	1	2	2	3
	v. Number of research products / process / prototype gone into prefeasibility / industrial scale testing or prototype development	0	1	2	3	4	5
	vi. Science / Arts Products or Any Creative Activity Performed / Displayed at National or International Level	9	12	14	16	20	23
Innovation & commercialization Linkages, Coordination & Networking	i. Number of Visits by Representatives of Industry or Community Members Regarding Potential Research Subjects	10	15	20	25	30	35
	ii. Number of Agreements Signed for Collaboration with Industry, Government or Community (at National / International Level)	18	20	25	28	30	32
	iii. Number of National or International Honors or Awards Won (in Research Excellence,	8	10	14	16	18	22

	Innovation & Commercialization)						
	iv. Number of Visits by Representatives of Industry or Community Members Regarding Potential Research Subjects	7	10	13	15	18	22
C. Sustainability & Capacity Building							
Sustainability	i. Annual Research Revenue Generated by ORIC through Research Grants & Projects						
	ii. Yearly Revenue Earned from Licensing, Royalties, Policy Advocacy, or other related Academic Activities	0	1 million	1.5 million	2.0 million	2.5 million	3.0 million
	iii. Five-Year Strategic Plan	✓	✓	✓	✓	✓	✓
Training, Mentoring & Workshops	i. Number of Trainings / Workshops / Seminars / Conferences Arranged by ORIC on Research, Innovation, & Commercialization etc.for Faculty, Researchers and Research Students						
	ii. Number of Trainings / Workshops / Seminars / Conferences Arranged by other HEIs / Entities on Research, Innovation, & Commercialization etc.for Faculty, Researchers and Research Students						
	iii. Number of Exhibitions / Showcasing Events / Industry Linkages Fair / Seminars / Industry or IP &						

	Licensing Stimulus Arranged by ORIC						
	iv. Number of Trainings / Workshops / Seminars on Research, Innovation, & Commercialization etc. for and attended by ORIC Personnel						

Reviews and Updating

The ORIC at University of Swat welcome inputs from researcher, community and policy makers regarding research, innovations and commercialization. It also engages the local experts from private sector to explore opportunities and conducting research on areas of mutual interests. The University of Swat also constituted ORIC-Steering Committee as a governing body of this office. It will review the 5 Year strategic plan and performance indicators of ORIC office. The ORIC Office shall work under the updated guidelines of the Higher education Commission and at far with the international standards to make this office impactful and effective.

6. SWOT ANALYSIS

STRENGTHS:

- Experienced faculty / Researchers
- Availability of expertise in various research fields
- University own building & availability of basic Infrastructure
- Availability of opportunities to conduct research on local issues such as tourism, minerals, forest ecosystem services, waste management, fisheries etc.
- Natural geographical advantage of having income generating resources such as tourism, handicrafts, marble and natural capital.

WEAKNESSES:

- Availability of less research grants
- lack of innovative and practical research
- lack of industrial / community driven research
- lack of research activities in leadership/policy making and partnerships
- lack of state-of-the-art research laboratories

OPPORTUNITIES:

- Building partnerships and focus on the innovative and practical research
- Exploiting the local opportunities and linkages with industries in;
 - i. Tourism
 - ii. Medicinal Plants
 - iii. Handicrafts
 - iv. Marble & Gemstones
 - v. Fresh Water Fish
 - vi. Horticulture
- Enhancement of overhead cost from 02 to 15 % (if ORIC, UoS is registered)
- Earnings from consultancy services
- Monetization of Intellectual property
- Contribution to the society in socio-economic uplift
- Guide policy makers on the local issues and to have informed decisions
- Guiding and employing the local youth through providing entrepreneurship skills

THREATS:

- Cut on the research resources by the source institution
- Un-sustainable collaborations to conduct joint research with national and international organizations
- Invisibility of research and lack of appropriate dissemination mode.
- Disconnect from the national and international policy makers and experts due situating in the far flung areas.