

ITC'S STRATEGIC FRAMEWORK FOR ACHIEVING AND DEMONSTRATING IMPACT

FACULTY OF GEO-INFORMATION SCIENCE & EARTH OBSERVATION
UNIVERSITY OF TWENTE



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READING GUIDE

THIS STRATEGIC FRAMEWORK CONSISTS OF TWO INTERLINKED PARTS:

1. PART 1: THE CONCEPT -

DESCRIBES ITC'S IMPACT APPROACH, SCOPE, GUIDING PRINCIPLES AND STRATEGIC GUIDELINES. THE CONCEPT IS THE REFERENCE FOR OUR IMPACT-DRIVEN WAY OF WORKING FOR THE YEARS TO COME.

2. PART 2: THE OPERATIONAL STRATEGIES -

DESCRIBES THE IMPACT PATHWAYS NEEDED TO ACHIEVE THE ENVISAGED IMPACT. THE STRATEGIES ARE TIME-BOUND AND WILL BE FREQUENTLY REVISED BASED ON THE PRIORITIES AS EXPRESSED BY THE ACADEMIC AND SUPPORTING DEPARTMENTS AND WILL BE ELABORATED IN MORE DETAIL BY APPLYING A PROJECT-BASED APPROACH.

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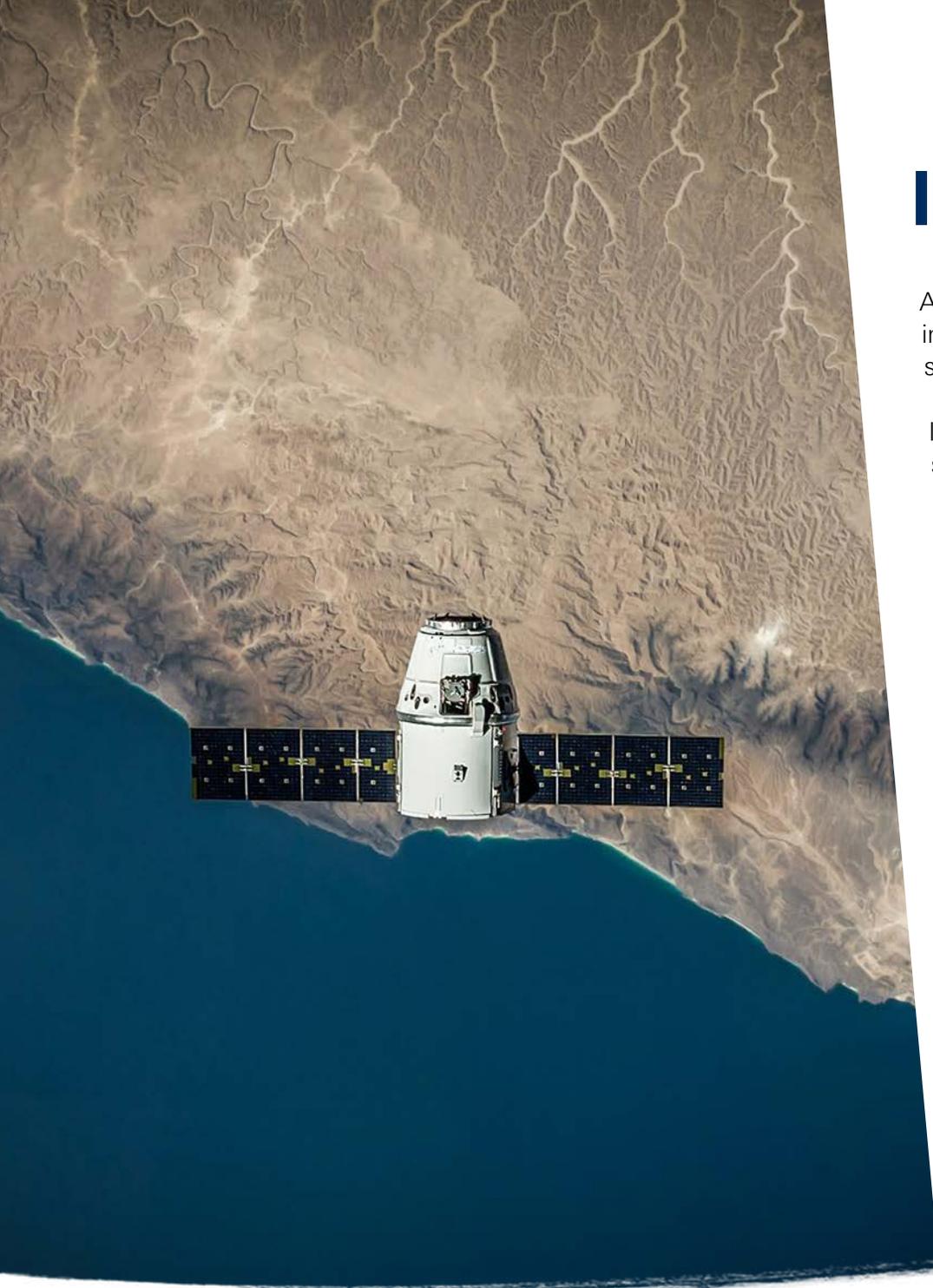
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INTRODUCTION

Achieving and demonstrating impact is high on the agenda of many national and international organisations. ITC strives to actively contribute to achieving positive societal and academic impact in geosciences and technologies.

ITC's mission in today's world is capacity development, where we apply, share and facilitate the effective use of geo-information and earth observation knowledge and tools for tackling global problems. ITC uses its capacity development expertise to address societal challenges faced by communities across the globe at every scale, from individuals to organisations to countries to society at large. (reference: ITC's vision and mission 2030 <https://www.itc.nl/about-itc/itc-mission-and-vision-2020-2030.pdf>).

At the faculty level, an impact-oriented way of working contributes to the organisational mission, vision and underlying strategies and policies. On a more individual level, it supports ideas that will change the world **(societal impact – through knowledge exploitation and utilisation)** or contribute to academic advances across and within disciplines, including significant advances in understanding, methods, theory and application **(academic impact – through knowledge creation and dissemination).**

This Impact Strategic Framework aims to contribute to the further development of ITC's impact-driven way of working by providing strategic guidance and

- (i) contributes to the realisation of our capacity development mandate,
- (ii) showcases the evidence of the long-term achievements of our activities in research, education and institutional strengthening,
- (iii) makes us accountable to our partners, the subsidy provider and funding agencies,
- (iv) provides relevant information for decision-making purposes, reporting, project acquisition and resource mobilisation, and
- (v) provides input for reflection and learning from ongoing/past initiatives to generate a stronger societal impact in the future.

The framework describes how strengthening our impact-driven way of working can be achieved by defining the ultimate goals, outcomes, outputs and related activities, the so-called "strategic pathways". It also identifies with whom we need to interact to make an impact, the "productive interactions".



PART 1: OUR IMPACT-DRIVEN WAY OF WORKING

CHAPTER 1-1: FOCUS AND SCOPE

FOCUS

Impact has academic and societal elements, defined as follows:

Academic impact is the demonstrable contribution that excellent research makes to academic advances across and within disciplines, including significant advances in understanding, method, theory and application.

Societal impact is the demonstrable contribution that we make to society, of benefit in the medium and long term to individuals, organisations, businesses, and nations.

Different subtypes of impact exist. The following classification is based on a taxonomy developed by the European Science Foundation. (blue is academic and orange is societal impact).

This framework also takes in account the organisational impact needed to contribute to academic and societal impact.

Organisational impact is the extent to which an activity has promoted organisational improvement in terms of sustainability, capabilities and concrete positive results and changes in our operations, education, research and institutional strengthening.



Reference: adapted from <https://www.ucd.ie/impacttoolkit/whatisimpact/>

SCOPE

Several external and internal policy documents and reference frameworks exist. We aim to align with these policies when demonstrating and achieving our impact.

Responding to international policy reference frameworks

International policy frameworks (e.g. the SDG's, Sendai Framework, Paris Agreement on climate, etc.) serve as a reference for designing, planning and monitoring the impact of our primary processes.

Where relevant, our contribution to these reference frameworks should be highlighted in the impact planning cycle (design, implementation, monitoring and reporting).

Responding to the Dutch policy on development cooperation

The Dutch Government attaches great value to increasing the Dutch earning capacity and making it more sustainable. Therefore, it aims for transitions towards sustainability and digitalisation. Sectors in which the Netherlands plays a leading role, such as water, sustainable energy, agriculture and health, have great potential for societal impact. The Dutch Government believes that smart collaboration between governments, knowledge institutions and the private sector can speed up and enhance transitions such as digitalisation and sustainability. This is precisely why the motto of *Netherlands Branding* is "*Solving global challenges together*". The Dutch Development Cooperation focuses on a smaller number of themes that the Netherlands are really good at. Also, a choice has been made by our Ministry of Foreign Affairs in 2022 for a more focused approach in three regions: the Sahel, the Horn of Africa, and the Middle East and Northern Africa. It also continues towards achieving the SDG's and the campaign against the root causes of poverty, terror, irregular immigration, and climate change.

Alignment of ITC's activities receiving subsidy or funding from the Dutch Government or national funding agencies with these priority themes and regions is pivotal when developing impact-oriented proposals or preparing reports for accountability.

Contributing to the Dutch sector plans

The Rutte cabinet (2022) decided to invest annually in academic research on a structural basis based on co-designed sector plans. Making investments based on sector plans allows the selective expansion of research capacity and makes it possible to attract (new) research talent and increase the number of permanent appointments. This approach could also help achieve overarching goals, such as creating a future-proof range of educational opportunities and strengthening the strategic cooperation between institutions.

Universities are asked to present profiling plans, including the allocation of resources, contributing to achieving the sector plans' goals. Applying an impact approach when developing the profiling plans supports the description of the envisaged impact, the gathering of impact evidence, monitoring of the results and finally, the results-based reporting to the Government.

Alignment with UT's mission and vision

The UT defined three strategic goals in its vision, mission and strategy report "Shaping 2030"; shaping society, shaping connections, and shaping individuals (and teams).

UT's mission statement (we empower society through sustainable solutions) and vision statement (we contribute to the development of a fair, sustainable and digital society between now and 2030) requires a focus on the impact or positive changes we would like to see in our people, in our partners and in the society we serve.

Contributing to ITC's priorities

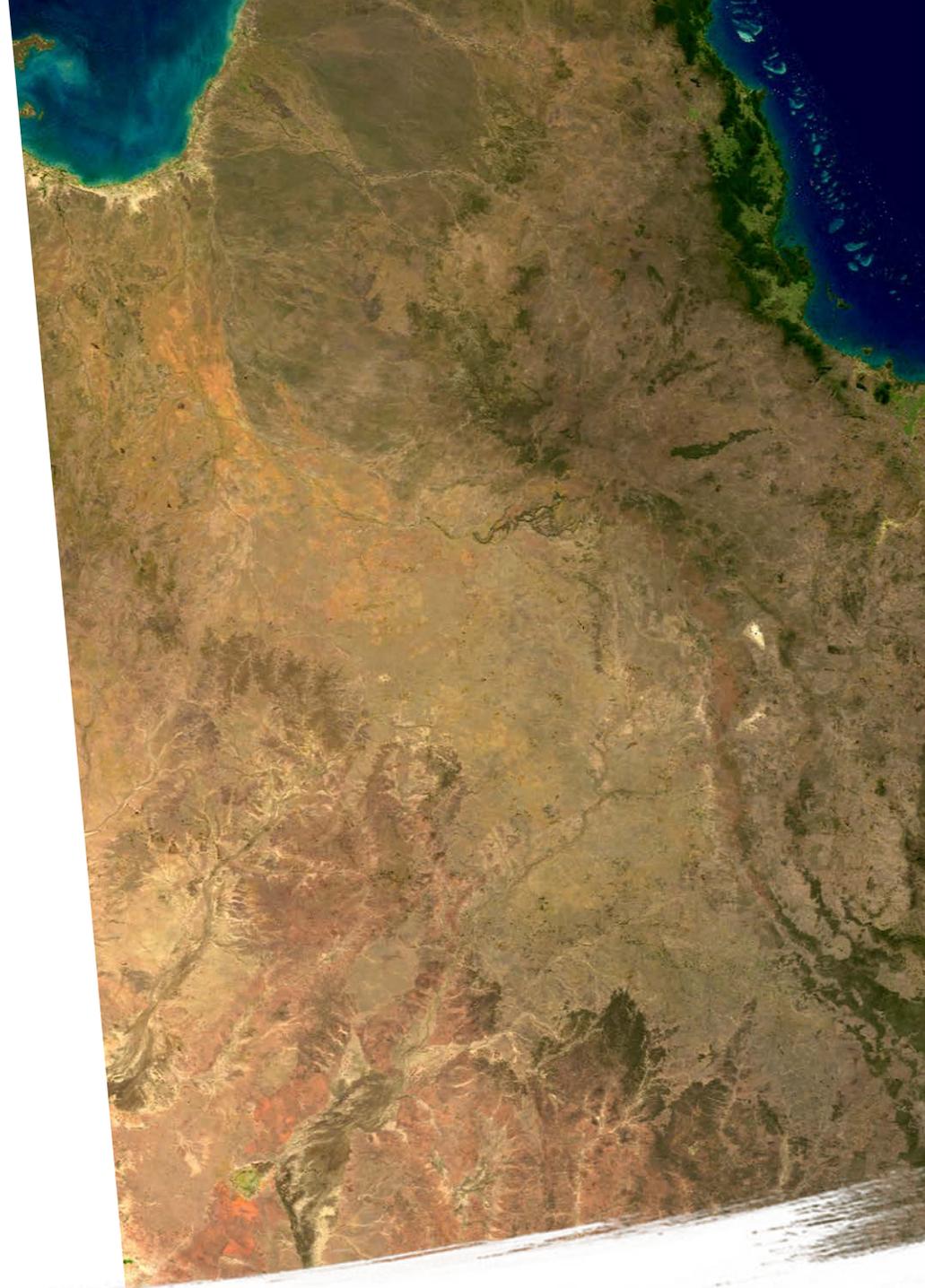
For the coming years, ITC's faculty Board defines priority areas to ensure a sustainable and future-proof organisation. These priorities are derived from ITC's Strategy document (an operational guidance document based on our Mission and Vision) and through consultation with staff.

This framework provides conceptual and operational support to realise these priority areas.

Strengthening ITC's themes

In the mission and vision of ITC, we expressed the ambition to cluster our expertise to create focus and shape a clear long-term profile. Core to the process is, on the one hand, the capacity currently in-house. On the other hand, the process should also explore under-exposed domains, which in the medium to long term, are highly relevant to the ITC core domains of education and research-driven capacity development in Geo-Information Science and Earth Observation. The themes and sub-themes are intended to create cohesion and collaboration across departments.

The four profiling themes (GeoAI, GeoHealth, Resource Security and Disaster Resilience) serve two main objectives with an external and internal focus. Externally to showcase what ITC is good at and internally to stimulate further collaboration among ITC staff. Designing, monitoring, evaluating and showcasing the impact of the four profiling themes contribute to achieving both objectives.



CHAPTER 1-2: RATIONALE AND GUIDING PRINCIPLES

Creating impact, be it societal, academic or organisational, requires a way of working and thinking that goes beyond the development of tools, services, and products and aims to support desired positive changes in society or strengthen the scientific community in our geo fields of expertise.

This implies understanding the societal or academic challenges and the desired changes we want to see over time. Hence, the focus lies on what we want to achieve rather than what we want to do, produce or deliver. This, in turn, requires an additional set of capabilities and full awareness of what is understood by impact, how we can organise our activities from an impact perspective, and how impact evidence can be collected. The framework supports strengthening those capabilities and facilitates the process of embedding an impact-driven way of working within our faculty. This is an organic process without a strict timeline and top-down regulations whilst encouraging bottom-up initiatives from our community.

The following section¹ summarises the meaning and function related to guiding principles for the further development of ITC's impact-driven way of working.

MEANING

- ITC generates impact in diverse ways, moving research and knowledge frontiers through innovative research, contributing to qualified professionals through teaching students, and empowering institutes and others to make better-informed decisions through purposely sharing knowledge with society.

¹ Section adapted from the concept note "On impact and culture"; Document developed by the ITC Impact Community of Practice (CoP); Mariana Belgiu, Javier Martinez, Frank Ostermann, Roelof Rietbroek, Cees van Westen, Wieteke Willemen, 01-07-2022



FUNCTION

- ITC wants to capture its impact to justify and show its Capacity Development mandate to the Dutch Ministry of Foreign Affairs (BuZa) and other stakeholders.
- ITC wants to learn from ongoing/past projects and initiatives to improve project design to generate a stronger impact in the future in the context of Monitoring, Evaluation and Learning (MEL).

GUIDING PRINCIPLES

- When defining “impact”, the impact domain or field and direction should be clarified.
- Learning from existing impact-oriented initiatives and outcomes worldwide should be encouraged.
- Different staff positions require different levels of attention to research, education and/or institutional strengthening in achieving societal impact.
- All ITC staff have a role in the knowledge chain (generation, facilitation, use) and need to be aware of and recognised for that.
- The choice of societal impact criteria is based on why and when an assessment is relevant. Short-term outputs/outcomes should not be dismissed as the likelihood that they can be incorporated into ‘learning’ is the largest.
- Impact is not, by default, positive or present. Systematic reflection on risks (negative impact on society and staff) with honesty and transparency are needed to increase positive societal impact in the future.
- Societal impact assessments of projects/initiatives are helpful but take time and resources and require skills.
- An (impact) culture is not made top-down; bottom-up scoping on needs and motivation is needed.
- Facilitation, guidance, and long-term enabling (infra-)structures are required (from science communication support and visualisations to metrics and IT).
- Impact assessment and communication should not be or feel like another duty on top of the already heavy workloads.

- Recognition and rewarding of staff for demonstrating and achieving impact in a relevant way need to be in place.
- Work with the willing. Let a smaller group of staff (but with sufficient critical mass) kick off, learn and scale up.
- Open Science and Ethics are key vehicles for generating positive societal impact. Science communication is vital in showcasing impact.
- Writing about our impact is always superseded by others writing about our impact (e.g. users of our research and education outputs). Keep track of that.
- We have to be realistic in our ambitions. We occasionally seem to overestimate our potential impact and as a consequence, formulate ambitions that are likely to be disappointed.

CHAPTER 1-3: MONITORING, EVALUATION AND LEARNING

Impact is something that can't be easily related to certain actions or projects because it is a long term, almost evolutionary phenomenon which can be positive as well as negative. Therefore, measuring impact in an absolute way is a challenge. It might appear that the impact lies in accelerated positive developments.

We apply a bottom-up monitoring, evaluation and learning (MEL) approach, starting on a per-project base and growing organically to an organisational or system level that will support the impact culture.

MONITORING & EVALUATION

The MEL system is an integrated part of the impact-driven way of working. The MEL system contains tools to be applied during (i) project design, (ii) project implementation, and (iii) project finalisation and impact assessment.

EVIDENCE-BASED IMPACT EVALUATION

The (societal) impact assessment should ideally focus on the expected changes defined in the impact planning or Theory of Change model and on the measurable effects of the project interventions linked to strengthening capacities on individual, organisational and institutional levels. Again, the ToC and pre-defined indicators on output and outcome level should be used as reference. The website of the Project Support Desk provides information on conducting an evidence-based impact assessment/impact evaluation.

LEARNING & REFLECTION

Organisational learning is a fundamental pillar of an impact-oriented way of working. The capability to adapt and self-renew requires that people and institutions learn from experiences, share information and improve themselves. A learning organisation is "an organisation where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning to see the whole together".



CHAPTER 1-4: GOVERNANCE AND SUPPORT

The ITC Faculty Bureau is responsible for facilitating the implementation of the Impact Strategic Framework, providing sufficient guidance and support to the scientific and supporting departments and capturing experiences by staff for learning and improvement. Responsibility will be delegated to a - to be appointed - Impact Officer or Impact Office.

A Community of Practice (CoP) and a Working Group (WG) on Impact support the Impact Officer.

The CoP consists of one representative from each of the six scientific departments. Expansion is foreseen, involving representation from the ITC supporting departments. A ToR for the CoP has been developed. The main goal is to create broader awareness and knowledge on impact within the faculty, to broaden the group of staff members that can introduce the impact-oriented way of working into the scientific community and promote the design, implementation and evaluation of the impact approach and plans.

The WG comprises a representative of the three primary processes and ITC's data analyst. The main goal of the WG, as described in the ToR, is to develop and maintain updated the framework by applying a participatory approach, supporting the implementation and conducting evaluations regularly to assess the results and outcomes of the framework.

The Impact Officer chairs the CoP and WG.

The ultimate goal of both the CoP and the WG is to create the enabling conditions on the organisational level and the abilities on the individual level to apply the impact-oriented way of working in all capacity development efforts (education, research, institutional strengthening) and to promote an automatic transition to daily academic practice.



PART 2: IMPACT PATHWAYS

CHAPTER 2-1: IMPACT TERMINOLOGY

The impact pathways consist of the main goals, outcomes, outputs, productive interactions and strategic pathways of ITC's impact-driven way of working.

The two goals have an internal and external dimension. Goal 1 focuses on organisational impact, strengthening our internal impact-driven way of working. Goal 2 focuses on the societal and academic impact.

The outcomes are the envisaged changes we like to see over time in our organisation and in society at large.

The outputs are the concrete deliverables as a result of the activities we conduct.

The productive interactions describe with whom (researchers, stakeholders, etc.) we need to interact to make impact happen.

The strategic pathways present the activities and immediate outcomes in selected focus areas.



CHAPTER 2-2: GOALS, OUTCOMES, OUTPUTS AND PRODUCTIVE INTERACTIONS

GOAL 1

ITC IS RECOGNISED BY STAFF AND STAKEHOLDERS (PUBLIC AND PRIVATE) AS AN IMPACT-ORIENTED CENTRE OF EXCELLENCE IN THE FIELD OF GEO-INFORMATION SCIENCE AND EARTH OBSERVATION.

OUTCOMES

- An organisation that promotes, recognises and rewards an impact-focused way of working of staff
- An organisation that adopts the impact way of working in all operations and planning-control cycles
- An organisation being visible concerning our impact on the UT community, partners and stakeholders

OUTPUTS

- A group of staff members who facilitate the introduction of the impact-oriented way of working in our scientific community and promote the design, implementation and evaluation of the impact approach and plans
- Staff with the ability to apply the impact-oriented way of working in all capacity development efforts (education, research, institutional strengthening) and to promote a transition to daily academic practice
- Broader awareness and knowledge of impact measurements within the faculty
- The necessary enabling conditions to support the embedding of an impact culture/way of working

PRODUCTIVE INTERACTIONS

- A permanent Community of Practice, with representatives of the Scientific and Supporting Departments for promoting and making sure the Faculty Board impact team, creates fit-for-purpose strategies/actions for our capacity development efforts
- A Working Group Impact, with representatives of the three primary processes, for guiding and monitoring the implementation of ITC's Impact Framework
- Regular meetings of the participants of the CoP and WG with staff of their academic and supporting departments
- The Project Support Desk (PSD) team with academic and supporting staff to identify and address needs of staff

GOAL 2

ITC CONTRIBUTES TO ACADEMIC AND SOCIETAL CHANGES THROUGH THE CONDITIONS AND RELATIONSHIPS IN SOCIETY THAT WE WISH TO SEE OCCURRING TO MAKE A POSITIVE IMPACT IN PEOPLE'S LIVES THROUGH OUR ACTIONS IN RESEARCH, EDUCATION AND INSTITUTIONAL STRENGTHENING PROJECTS.

OUTCOMES

- Individuals, organisations and institutions ITC works with adapt and apply geo-information and earth observation knowledge and tools for tackling challenging academic and/or societal problems
- ITC staff move research and knowledge frontiers through innovative research, contribute to qualified professionals through teaching students and empower institutes and others to make better-informed decisions through purposely sharing knowledge with society

OUTPUTS

- ITC applies an impact approach to education, research and institutional strengthening
- ITC staff apply tools and methodologies to design, implement, monitor, evaluate and learn the envisaged academic and/or societal impact

PRODUCTIVE INTERACTIONS

- Interaction with the Faculty Bureau, Impact Officer, PSD, CoP and WG on Impact, Ethic and OS officers, M&C
- Consultation among profiling & expert teams and scientific departments
- Regular meetings and gatherings across the departments
- Interaction with prospective universities and organisations for collaboration
- Interaction with relevant partners (public, private, societal), intergovernmental organisations, stakeholders, alumni, end-users

CHAPTER 2-3: STRATEGIC PATHWAYS

Several Strategic Pathways support the achievement of the envisaged goals, outcomes and outputs.

MOTIVATION AND AWARENESS-RAISING

- ✓ Enhanced awareness and understanding of the meaning, relevance, design, implementation and evaluation of societal and academic impact.
- ✓ The impact-driven way of working of our staff strengthened through several dedicated services.

ACTIVITIES

- Identifying the needs concerning staff development and composition to strengthen strategic impact thinking and clarifying in recruitment how this influences performance
- Organising training sessions, seminars and workshops based on the internal needs assessment
- Providing direct coaching and support by the staff of the Project Support Desk (PSD), portfolio holders and coordinators to be requested by academic staff when preparing a project proposal
- Collecting and supporting the development of good practices and examples for sharing and dissemination
- Broadening the group of staff members with practical experience in the impact approach
- Seeking alignment with or support from UT-wide initiatives on impact
- Creating spaces and possibilities for thinking together on impact approaches between individuals, teams, and departments by establishing professional science corners

RECOGNITION AND REWARDING

- ✓ Criteria related to academic outputs measured and transformed into rewards and recognition that researchers can aim for due to their contribution to achieved academic or societal impact.

ACTIVITIES

- Designing and implementing concrete and objective metrics and a guidance manual to reward and recognise the work of academic staff in support of our impact approach
- Providing capacity building so everyone can communicate their impact, e.g. during their annual review or when writing applications
- Designing and organising events, such as ITC's Impact Recognition Day, which can be a concrete incentive for academic staff to elaborate on their impact
- Highlighting our impact way of working during recruitment as part of our performance assessment process
- Interacting with the shaping expert group "Individuals and Teams" of the UT

MANAGEMENT AND OPERATIONS

- ✓ Our impact approach embedded in our long-term strategies, operational procedures, internal processes and planning & control cycle.

ACTIVITIES

- Investigating the feasibility of a planning, control and reporting system for impact monitoring on departmental and faculty level
- Assisting in including the impact way of working in the Personal Development Plans
- Including an impact paragraph in the MARAP (periodical management report)
- Preparing an annual progress report on the impact activities and achievements
- Analysing currently available data and collecting new impact evidence with departmental staff for reporting from an impact perspective
- Interacting with ITC's controller to adjust the planning and control mechanisms

PARTNERSHIPS, MEMBERSHIPS, NETWORKING AND BENCHMARKING

- ✓ ITC benefitted from national and international initiatives promoting impact by actively being involved in broader network groups dealing with impact approaches.
- ✓ Strategic partnerships, networks and memberships established with a similar interest in focusing on academic and societal impact as drivers for our interventions.

ACTIVITIES

- Reviewing ITC's strategic partnership roadmap from an impact perspective
- Mapping all impact-oriented networks, ITC is already involved in.

- Collaborating with decision-makers and maintaining an influential partner network
- Conducting an inventory of needs (e.g. through alumni network or an appropriate industry board) and identifying relevant institutes
- Engaging with relevant stakeholders (not based on our "themes" but on "their" challenges)
- Build stakeholders networks and collaborations (intra-departmental, university, local public)
- Promote a collaborative way of working between researchers and stakeholders/problem owners

COMMUNICATION AND DISSEMINATION

- ✓ Communication and dissemination channels in place to showcase examples and outputs of positive societal impact for learning, visibility and accountability
- ✓ Our website and social media aligned with and focused on the four profiling themes.

ACTIVITIES

- Sharing good practices to enhance the impact-driven way of working and to inspire others to focus on and show impact
- Developing an annual impact report
- Regularly updating ITC's website with good practices on realised impact
- Exploring websites, social media etc. of other universities for inspiration
- Aligning with the development of Geo e-Academy portal with news/ events/videos, etc
- Investigating whether a 1-page 'layman's summary' can be added to/ integrated into MSc theses (that can be used for communication and for learning for the student)

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