WP 2

[2.8] Training on the Theoretical Background of the University Third Mission – Theoretical and practical overview



Author: Matsatso Tepnadze

Date: June, 13, 2022

Title: The Third Mission of the University

Course description and learning objectives

After completing this module, you will be able to:

- Obtain a theoretical knowledge about the third mission concept of the university
- Be able to understand the importance, model and structure of Entrepreneurial university.
- Obtain the knowledge about the knowledge transfer as a function of the third mission
- Develop competencies to understand measures necessary to support the design and the management of the third mission of the university.
- Understand competencies to identify The Triple Helix Model (THM)
- Understand theoretical background for evaluation of the third mission and its impact

Target group:

- Administrative units/management of Universities;
- Management of regional authorities;
- Management of local authorities;
- Academics and non-teaching staff.

Expected implementation

Date: 13-14 June

Place: Caucasus University, Tbilisi, Georgia

Total Duration- 3-4 hours. Number of participants: 85

Expected learning outcomes:

- Importance and function of the third mission
- shift of higher education
- Characteristics of existing / traditional and new missions of Universities
- The mission of universities evolving concept
- The new environment shaped for universities
- The definition of Entrepreneurial university
- The structure of entrepreneurial university, constraints and potentials
- The measures to manage entrepreneurial university (management, activities, promotions and government support)
- Definition of Triple Helix Model (THM)
- Knowledge transfer as a role of the third mission
- Knowledge transfer offices (KTO)

- Strategic orientation of the university third mission
- Evaluation of the third mission and its impact
- Measures to support the development of TM
- CU case study, Third mission at CU- mapping of activities and strategic assessment

Didactical approach

Preparatory work:

- Literature search and reviews
- Creating structure of the presentation
- Preparing case

During the training:

- Presentation
- Case study analysis of the University Third Mission, short assignment of Public Engagement (PE)
- Feedback of participants

Content of the training:

- 1. What is the third mission of the university, importance, definition and analytical framework;
- 2. Theoretical background: Entrepreneurial shift in higher education, domains and measures;
- 3. Knowledge Transfer Offices as a function of the third mission;
- 4. The evaluation of the third mission and its impact;
- 5. Case study Third mission activities at the CU.

Further literature and useful links:

- Compagnucci, L., Spigarelli, F., 2020 "The Third Mission of the university: A systematic literature review on potentials and constraints" DOI: https://doi.org/10.1016/j.techfore.2020.120284
- Frondizi, R., Pantauzzi, C., Colasanti, N., Fiorani, G., 2019 Evaluation of University's Third Mission and Intellectual capital: Theoretical analysis and application of Italy
- Tepnadze, M., Agriculture and Rural Development Policies and Institutional Frameworks; Proposed Mapping for Wine Tourism in Georgia. DOI: http://doi.org/10.15544/RD.2019.075
- Caucasus University
- Erasmus + CBHE Strengthening the Quality and Relevance of the 3rd mission in Georgian universities / SQUARE- Mapping for the third mission activities at the University- report

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The University Third Mission – Theoretical and Practical Overview







Associate prof. Matsatso Tepnadze

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Lecturer

- Matsatso Tepnadze is a young professional, an academic, with more then 10 years' work experience helping government entities by identifying institutional and policy problems, conducting Economic research and creating policy reports with a focus to address socially problematic issues with responsible policy approach. As an economist, she's an extensive experience of working with inter-disciplinary and inter-sectorial teams, connecting people, problems, parties, both in academic and government sectors.
- Since November, 2021, she serves as an associate professor at Caucasus School of Business and gives lectures in Macroeconomics course. At the same time she is appointed head of research and data analysis office at the university administration.
- Immediately after joining Caucasus University's academic and administrative team, miss Tepnadze was actively involved in the ERASMUS + SQUARE Project "The Strengthening the Quality and Relevance of the Third Mission in Georgian Universities" and facilitated project implementation process. Activities with her active participation covers interaction with the EU mentors, inventory & mapping of the University Third Mission activities, attending thematic conferences, taking part in study tours and workshops in EU partner universities, preparing reports, presentations and sharing professional knowledge through thematic meetings and oral presentations, internally and externally.
- Prior to this, Matsatso served as a public official, formed head of policy analysis division at the Ministry of Regional Development and Infrastructure of Georgia. In this capacity, she regularly contributed institutional strengthening and capacity building programs and projects, improving project evaluation standards and formulating policy recommendations for the Ministry high level.
- In 2017 Matsatso Tepnadze participated in Asia Leadership Program for Sustainable Urban Development held by the Asian Development Bank Institute. In 2018 she was designated as a national representative in UN SDG's Council of Georgia, aimed at integrating SDGs into national policy system.
- Currently, Matsatso Tepnadze is a PhD candidate in Economics from Tbilisi State University. Her previous research publications address performance evaluation and impact assessment of regional development programs in Georgia (Road safety, water resources management, Rural policies, resource efficiency policies, etc.). Title of the upcoming PhD thesis is "Peculiarities of Cluster Formation in Georgia (Case Study of Kakheti Region).





The University Third Mission



Agenda

- The University Third Mission –definition, importance, concepts and key terms;
- Transformation Toward the concept of entrepreneurship
- Criteria for Publicly Engaged University;
- Entrepreneurial University –The US VS Europe;
- 3M Conceptual Framework;
- Entrepreneurial University- As a model of the University third Mission;
- KTO Knowledge Transfer Offices as an institutionalized 3M;
- Measures to support the design and the management of the entrepreneurial university;
- Structural linkages- Missions and interested parties/Stakeholders;
- Importance of Public Engagement;
- Target Groups for Third Mission Activities
- Measures to support the engagement of University staff and stakeholders in TM activities;
- Evaluation of the Third Mission and its Impact
- 3M priority direction in EU countries;
- CU 3M Strategic linkages and assessment
- SWOT Analysis CU 3M
- 3M Strategy and Recommendations



3M-Importance



- Building Knowledge based society, Knowledge based economy, knowledge based regions;
- Global financial, Environmental Challenges, Pandemic challenges
- "Universities should increasingly be embedded in their regional economies, making social economic and cultural contribution to their communities.

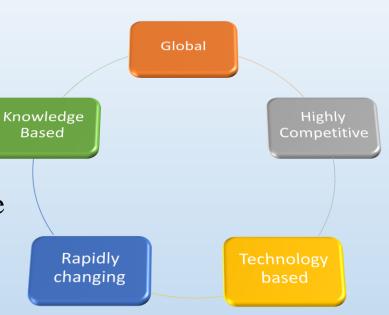
"Increasing need to produce, transfer and commercially exploit viable research findings, that progressively lead universities to rethink their role in local national and international contexts they belong to.,

"These leads to redesign and extend the missions of Universities."

"Universities engaged in third mission activities are becoming engines that contribute to the social, economic and cultural development of the regions in which they operate, by transferring knowledge to industry and to society at large."

"Academia should abandon their ivory towers and add social needs and economic objectives".

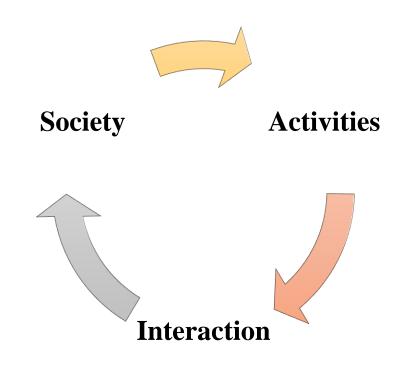
"Universities as institutions crucial for Regional Development" (Ertzkowitz 1983)





What is the University third mission -definition and three key terms

- Third Mission **activity**. A wide range of activities ways of going about education and research that put human and other resources to work, and that respect and engage with society;
- interaction as two-way processes, of dialogue, of co-creation and mutual learning;
- Society- A university as a multifaceted social organism with a discrete ecology that is connected in many ways to the wider social ecosystems of its city, its region, nation state and, for other universities, business communities and supra-national institutions;



Transformation of a traditional academy to the concept of entrepreneurship

Research University

Entrepreneurial University

Traditional missions of Teaching and basic research

Commercial viable, applied research products

Academic excellence driven from an individual interest

Academic Excellence driven from the shared knowledge with Society





Knowledge transfer in nonacademic environment

Support for Economic, social and cultural development process

Entrepreneurial University – The USVS Europe



More automatic, natural

Entrepreneurial culture - as a new way of bringing in much needed resources, such as funds, collaborations and access to facilities, <u>from different sources</u>.



Bottom up in the USA – Universities tradition to the market traditionally based on private funds and corporate contracts, providing substantial part of their income



Top Down in EU -European universities are still predominantly state financed



3M Conceptual Framework



3M Concept



Entrepreneurial University

KTOs

TM Partnership

Wide range of activities

Research (Knowledge transfer and innovation)

Teaching (Lifelong learning/continuing education, PBL, PBL)

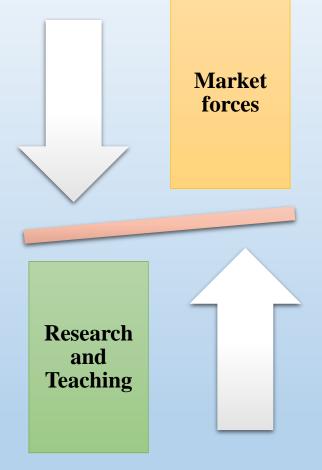
Social Engagement



Entrepreneurial Focus

- Commercialization and commodification of knowledge (Jacob, 2003)
- Entrepreneurial culture is seen as a new way of bringing in much needed **resources**, such as funds, collaborations, **access to facilities**, from different sources.
- Corporate University —model grounded on **profit**, **fund raising**, **private partnerships**.
- Corporate university means that university is totally **exposed to market forces**, which may take priority over teaching and research.
- Corporate University commodification of **university products and services** play a dominant role.







KTO – Knowledge Transfer Offices as an institutionalized 3M



- Collaborative configurations, often found in smaller universities;
- Benefiting from pooling resources in a shared KTO.

External model

 Suitable for large KTOs and large universities

Internal model

 Combination of External and internal models

Mixed model

- > KTOs define actions and resources which are allocated to achieve TM targets.
- ➤ In charge of supporting creation of spin-offs, , managing and marketing patents and licenses, through the protection of IPR.
- > KTOs facilitate interaction between research units and companies which result in consultancy contracts,
- > Promotion and dissemination of entrepreneurship education and culture amongst students and academic staff.
- Commercialization of academic knowledge's, patent activity, linkage between industry and university license activates and creation of spinoffs.



Four stages towards Entrepreneurial University



Term – "Enterprise University (2000) – enterprise culture is seen as a decline in public funding.

To establish priorities and formulate a strategic view of a university's direction.

To acquire financial resources from various sources

To begin to play an active role in commercializing the intellectual property arising from research performed by its staff.

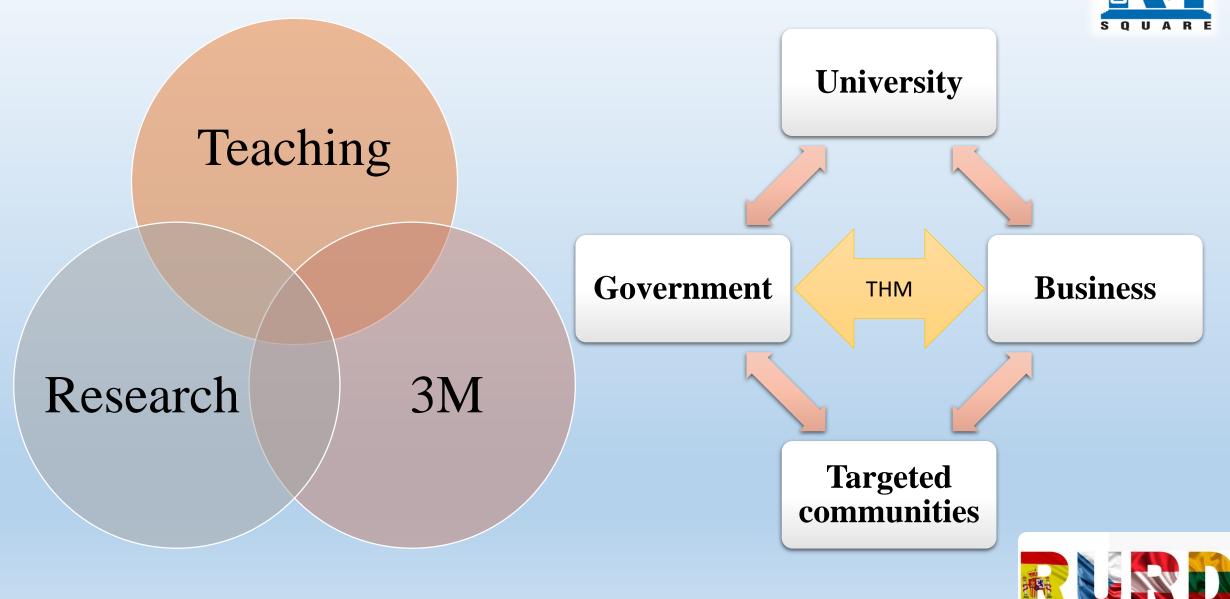
Focus to engage with stakeholders and active participation in development of regional innovation environment.

Four stages in the transformation towards the entrepreneurial university (Etzkowitz ,2013)



Structural linkages- Missions and interested parties/Stakeholders





Criteria for Publicly Engaged University



Public Engagement with Research-Active involvement of public sector in the University's research activities Engaged Teaching—Developing teaching activities, which positively impact on a target community, and enhance students' engagements skills. (PBL1, PBL2)

Engaged University means

Knowledge Exchange- Increasing the two way flow of knowledge and insight between the University and wider society

Social Responsibility—Seeking to maximize the social economic and cultural benefits to the public



Importance of Public Engagement

S Q U A R E

Relevance

-Research and Teaching are finely tuned to society's needs;

Innovation flourishes, as new ideas and insights flow into HEI's;

Research outputs are easily accessible and used.

Accountability– Purpose and impact of research are understood and valued by wider society;

Those with a stake in research feel they can influence investment priorities.

University governance is transparent and effective;

Why public Engagement Matters?

Social Responsibility-Universities are seen to act in socially responsible ways, contributing social mobility and attributing societal challenges.

Universities are experienced as good neighbors by the communities around them.

Trust-

Universities are trusted to act ethically and responsibly;

Controversial areas of research are debated and public attitudes are taken into accou

Measures to support the design and the management of the entrepreneurial university

T 3 U A R E

- "One size fit for all" approach can be avoided;
- University management understand and respond to **specific institutional contexts** rather than simply emulate the approaches of other institutions.
- A bottom- up approach more conductive to foster academic entrepreneurship;
- Understanding "internationalization" as an input can effect and advance conceptualization of entrepreneurial University (As an output);
- Trends toward entrepreneurial universities in **developing countries** needs to be conducted.

- Creation of **technology park**, **spin-off** firm formation, **patenting and licensing**;
- Contract research, industry training courses;
- Publishing academic results,
- To broaden conventional set of spin-out activities by: "problem solving activities, consultancy, contract research, Joint research with external organizations;
- Participation in research consortia;
- Providing informal advise,
- Hosting personnel from external organizations and secondments;
- Informal contacts between people pay a strategic role in the entrepreneurial university. Mobility of students and researchers between academia and industry is crucial.

- The triple Helix Model Creating a permanent national university-industry -government cooperation forum in which members can explore areas of mutual interest and benefit, opportunities for collaboration.
- Support is needed to ensure that both industry and academia are aware of the existing measures and mechanisms for collaboration.









Target Groups for Third Mission Activities



Targeted community

Community

National and local governments, cultural and recreational areas, should, colleges, etc.

Public sector

Potential partners

Civil Society

- Civil organizations, charity and volunteer organizations,
- NGOs,
- CSOs

Business, private sector



Measures to support the engagement of University staff and stakeholders in TM activ



- Assessment and reward the performance of staff units who contribute to the success of TM activities;
- Highlights individual academic profiles, by organizing group meetings, focus groups and one to one meetings at department level;
- Focus on more micro practices to engage academics rather than imitate strong leadership math's;
- Further research should be conducted for incentive policies for academic and teaching staff engagement;

Engagement of academic and non-teaching staff

- Invite communities to identify their learning needs (needs assessment)
- Producing media communications, via **TV and radio** for different target groups of interest and society at large.
- Universities should bridge cognitive, institutional and cultural distance;



Engagement of external Stakeholders

- Establishing **regional development centers** as a
 supporting structures for third
 mission activities, places to
 build partnerships, learn, create
 and exchange knowledge;
- Identify regional inequalities in growth levels;
- Engage academics by focusing in place-based sustainability needs;
- Government should prepare society for more **intense interaction with universities** by further encouraging donations.

Policy makers

Evaluation of the Third Mission and its Impact



A non-profit social approach

Academia is committed to society and organize services **at little or no cost** to the final service user.

An entrepreneurial focus

Universities should try to diversify their income and generate sources of funding by developing services offered to society, industry, , other institutions, , and /or former students (KT, Cont. Edu , Employment)

Innovative approximation

Innovative TM services that research units transmit to society going beyond traditional TK.



A non-profit social approach –





Non academic dissemination, Media communication. Volunteer contribution to society (Labor, expertise, Educational outreach)

Indicators tied to social services at little or no cost to the final service user.



Also.. Services for retired person Courses offered to academic staff didactics,

Cultural activities, exhibitions, fit forums, etc.

Social Networking

Contributions to public policy

An Entrepreneurial Focus

Universities make strategic diversification of their income, and generate sources of funding by develous services offered to society, industry, other institutions, and/or former students.

- Consultancy for industry,
- Patent registration,
- Commercialization of IP
- Advisory work and contracts,
- Shared development of research,
- Problem solving agendas,
- Contract and collaborative research.

- Lifelong learning
- Teaching activities / LLL
- Curriculum alignment of society's needs;
- Open and Distance learning (ODL)
- Commercialization of facilities,
- Organization of conferences.

- Staff mobility (flow and exchange)
- Students placement,
- Former student employ links,
- Training for company creation and self-employment;
- International activities: Student and teacher exchanges,
- Doctoral and continuing education training in developing countries.

Knowledge transfer

Continuing education

Employment perspective

International activities

Students and teacher exchanges,

Doctoral/cont. edu training in developing countries



A non-profit social approach –





Search for seed and venture capital

Business networking;

Innovation and networking with entrepreneurs;

Development and innovation in specific industries;

Company creation for patent exploitation;

Innovative 3M services, beyond traditional Knowledge transfer..

Consultation services for governments;

Conferences for research;

3M priority direction in EU countries



Healthcare and demography,	
Food safety	
Bio economy	
Green Transport	
Resource efficiency	
Energy efficiency	
Social inclusion	

3M Strategic research and education profile – Ideas for teaching and research (SDGs, UTU,





13 CLIMATE ACTION















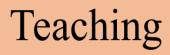






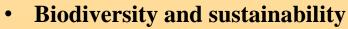






Research

3M



- **Future Technologies and Digital Society**
- **Cultural memory and social change**
- Children, young people and learning
- Health, Diagnostics and drug development
- Sea and maritime studies



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Case Study - CU and 3M - mapping and categorization



Continuing Education

- CU Training Center short-term training courses
- CU and Khetsuriani Sommelier joint professional certificate program
- CU Entrepreneurship Development Center
- CSB-GEM (Grenoble Ecole de Management) Dual MBA Program

Knowledge transfer

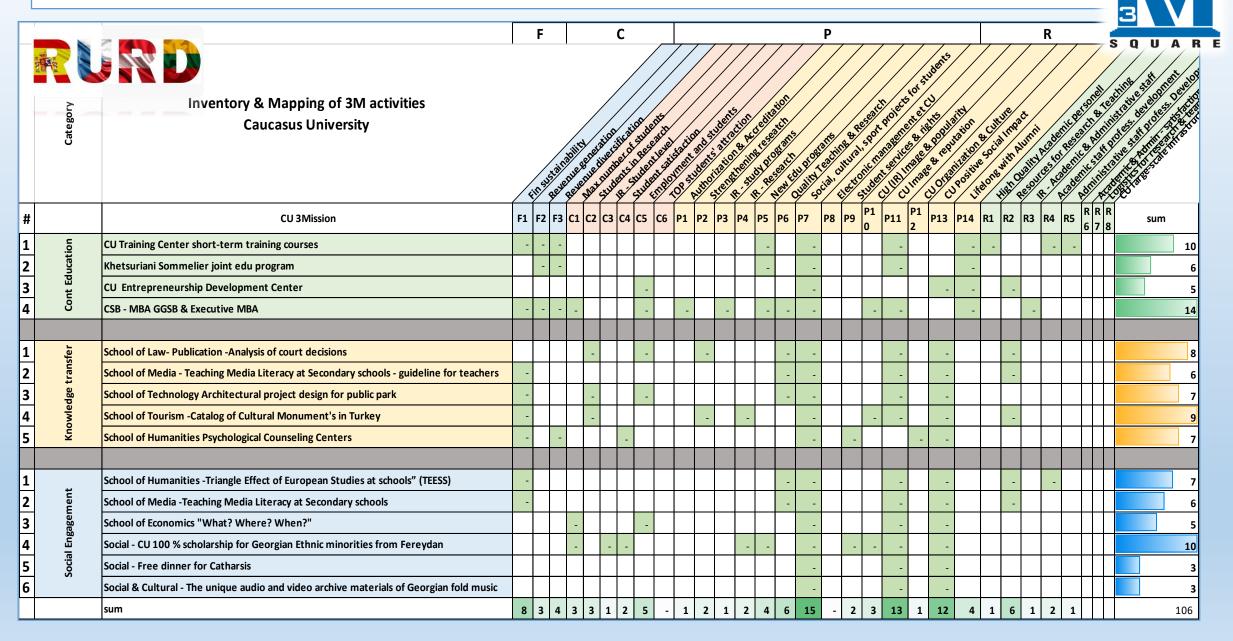
- School of Law- Publication: Analysis of court decisions
- School of Media Teaching Media Literacy at Secondary Schools guideline for teachers
- School of Technology Architectural project design for public park
- School of Tourism Catalog of Georgian Cultural Monuments in Turkey
- School of Humanities Psychological Counseling Centers



- Triangle Effect of European Studies at schools" (TEESS)
- Teaching Media Literacy at Secondary schools
- Intelectual TV show: "What? Where? When?"
- 100 % scholarship for Georgian Ethnic minorities from Fereydan Region of Iran
- Free dinner for all in nursing house
- The project of digitalization of unique audio and video archive materials of Georgian folk music



CU 3M – Strategic linkages and assessment



SWOT Analysis - CU 3M

What are the strengths and weakness/constraints on the way to 3M implementation?



Strengths:

- 1. Diversity of 3M activities
- 2. Linkage with the CU strategic priorities is moderately high;
- 3. Sufficient financial, human, technical, resources for further development;

Weaknesses:

- Lack of impact Evaluation methods and techniques (reason: Stream of TM activities consists of intangible assets, exchange of tacit knowledge.
- Lack of public engagement in terms of applied research, consultancy services, advisory mechanisms to government sector. Teaching and Research is somewhat isolated missions
- Lack of prioritization of 3M activates.

Opportunities:

- Prioritization of Third mission activities;
- Intensification of partnership with the private and public parties in 3M format;

Threats:

Identification of individual pioneers in 3M implementation porosess, general peace and stability locally and internationally.

3M status in other local HEIs of Georgia



Strengths

- naturally embeddedness, incorporated, embracement of 3M in the history of TSU
- big number of external and internal partners (ගර්නු)
- Strong focus on inclusiveness, share teaching resources
- Updates organizational structure and infrastructure
- Specific knowledge in certain fields: Linguistics, Biodiversity studies, earth sciences

Weaknesses

- Lack of planning, Lack of long term vision on 3M
- Lack of optimization and prioritization of activities
- There is no responsible department for 3M3M activities are sporadically and haphazardously initiated and implemented and stepped aside from the main strategic course.
- irregular and uneven distribution of 3M activities across the TSU faculties, lack of data collection and accountability reporting
- Scattered activities, spontaneous 3M initiatives and lack of focus in 3M

Opportunities

- new university, more flexibility, les inertia, easy to initiate organizational change
- Large investments in regional development, skills development,
- TSU reputation and trust in society
- Possibility to promote voluntary actions and civic participation



3M Strategy and Recommendations





- **Support** Support, recognize and award individual leaders and champions across the organization who embrace PE;
- **Interaction** Communicate consistent and clear messages and ensure open and two way flow of Knowledge;
- **Involvement** A good strategy is 'owned' and understood by the people who will implement it! (UTU)

With a faculty context, ensure applicability of being relevant and appropriate:



potential partners

- Academia (external internal);
- Government (local central);
- Industry;
- CSO, NGOs
- Targeted society(urban Rural, social context);

priority directions for 3M activities

- 3M categories;
- UN SDGs;
- EU 3M priority; directions;
- Annual priority directions

Make resource analysis

- Human
- Technical
- Financial
- Social
- physical

Track progress

- Individual planning
- Planned actions
- Track progress Indicators
- Provide response





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