

Sustainable Development and Social Justice: The Role of the University of L'Aquila

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Peace, Justice and Strong Institutions

3rd International Staff Training Week

University of L'Aquila – 21 June 2023

SUSTAINABLE DEVELOPMENT GOALS



Outline

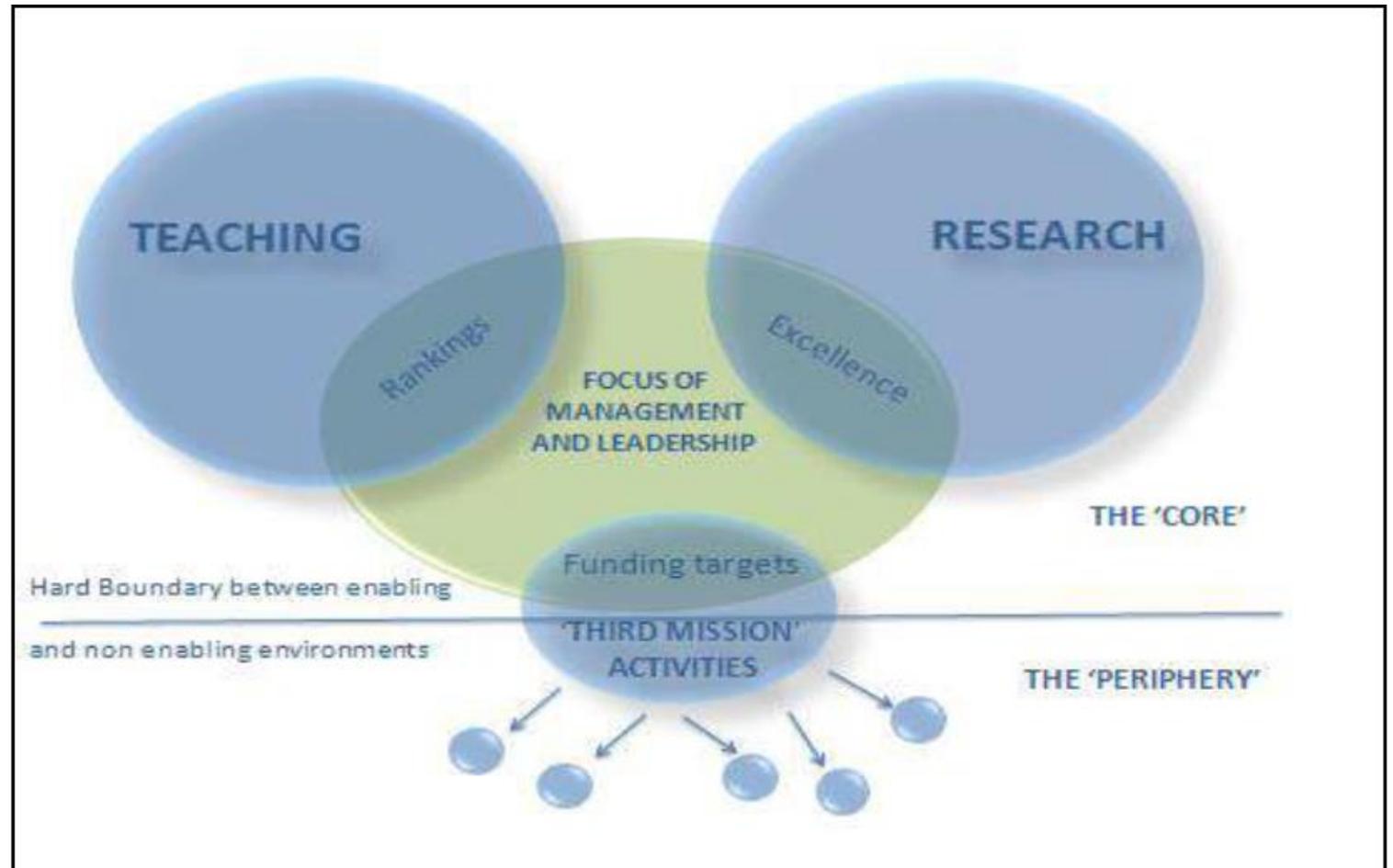
- International context: the missions of «civic universities»
- Sustainable development, social justice and international openness: the strategic agenda of the University of L'Aquila
- The new vision of knowledge sharing in the Italian university and research system
- The role of universities for disaster resilience
- Concluding remarks

International context: the missions of «civic universities»

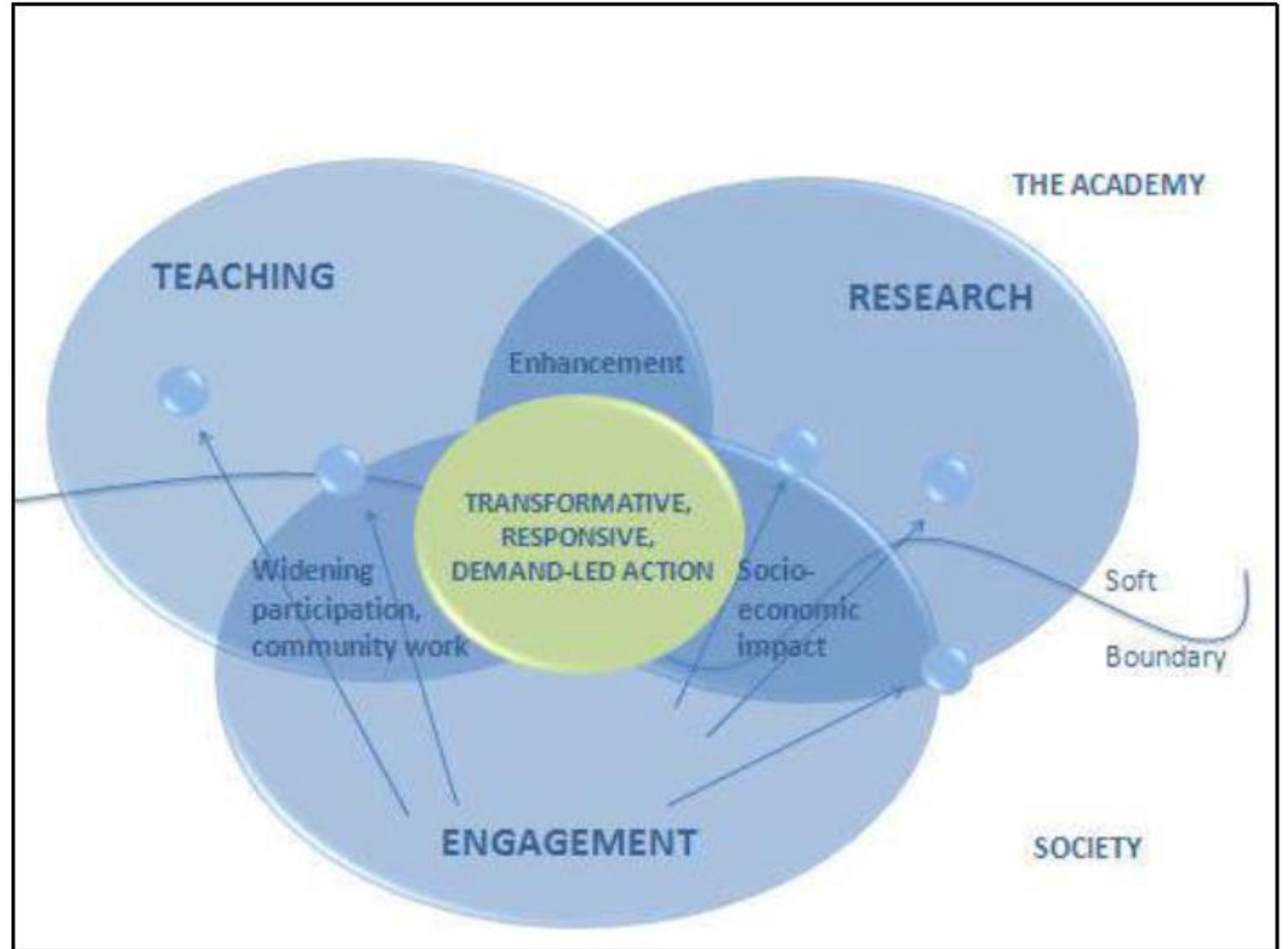
The missions of «civic universities»

- Three missions in the history of universities:
 - starting in the Middle Ages as institutions of **higher education**,
 - they assumed the nature of **research** centres only in a later period.
 - More recently, the acquisition of the "third mission": the **entrepreneurial functions** of universities, initially limited to technology transfer activities and then gradually extended to all the different actions with which universities can contribute to **economic growth and societal progress**.
- Gradual intensification of relations between universities, institutions and local communities

The Un-civic University (Goddard et al., 2016)



The Civic University
(Goddard et al., 2016)



The missions of «civic universities»: sustainable local development

- The natural result of this vision is the civic university's commitment to contribute to the achievement of the **Sustainable Development Goals** set by the international community in the United Nations 2030 Agenda.
- Greater importance in cases, such as that of L'Aquila, in which
 - **university students** represent an important **share of the total population**
 - the university is one of the essential parts of the **economic base of the local system**, so much so that it can be configured as an element of comparative advantage and a factor of development
 - the university is located in **relatively disadvantaged areas**
 - and/or in areas more **vulnerable to natural or anthropogenic disasters**

The missions of «civic universities»: international openness

- The cultural and social interaction between the university and its local community can go so far as to affect the **identity of the city and its symbolic representation**, as perceived by its inhabitants and from the outside.
- As the urban system evolves as a "**university city**", his **university** is rooted more and more deeply, while continuing to play the fundamental role of **connecting node with international networks of knowledge creation and dissemination**, which is the essence of its function as a "**civic university**".
- The goal is to increase the degree of **international openness** of the local systems in which university activities are carried out,
 - **Rejecting identitarian obsessions**
 - **Defending the ethical, economic and social value of globalization**
 - **Generating opportunities for encounter and mutual enrichment between different cultures.**

The missions of «civic universities»: sustainable development and social justice

- **Sustainable development**

- **Environmental** aspects: our responsibility towards future generations and other forms of life
- **Economic** aspects: a new pattern of growth, based on the idea of the «circular economy»
- **Social** aspects: contrasting inequalities

- The idea of **social justice** as «sustainable substantial freedom», that is «the capacity to expand the freedoms we have reason to value» (Amartya Sen, *The Idea of Justice*, 2009) and to ensure at least the same freedoms for the next generations (**environmental justice**)

- Article 3 of the Italian Constitution (1948):

«**All citizens** have equal social dignity and are **equal** before the law, **without distinction of sex, race, language, religion, political opinion, personal and social conditions.**

It is the duty of the Republic to **remove those obstacles of an economic or social nature which constrain the freedom and equality of citizens, thereby impeding the full development of the human person and the effective participation of all workers in the political, economic and social organization of the country.**»

The missions of «civic universities»: social and environmental justice

- Have inequalities increased?
- Inequality of what?
 - Income
 - Wealth
 - Opportunities
 - Social recognition
- Inequality between whom?
 - Between people around the world
 - Between people in individual territories
 - Between territories in the world
 - Between countries in the world
 - Between regions within countries
 - Between generations (over time)
- Reactions to inequalities (or their perception)
 - Common sense and its manipulation
 - Increasing inequalities and the revolt of “places that don’t matter” (A. Rodriguez-Pose)

The missions of «civic universities»: international cooperation, peace and strong institutions

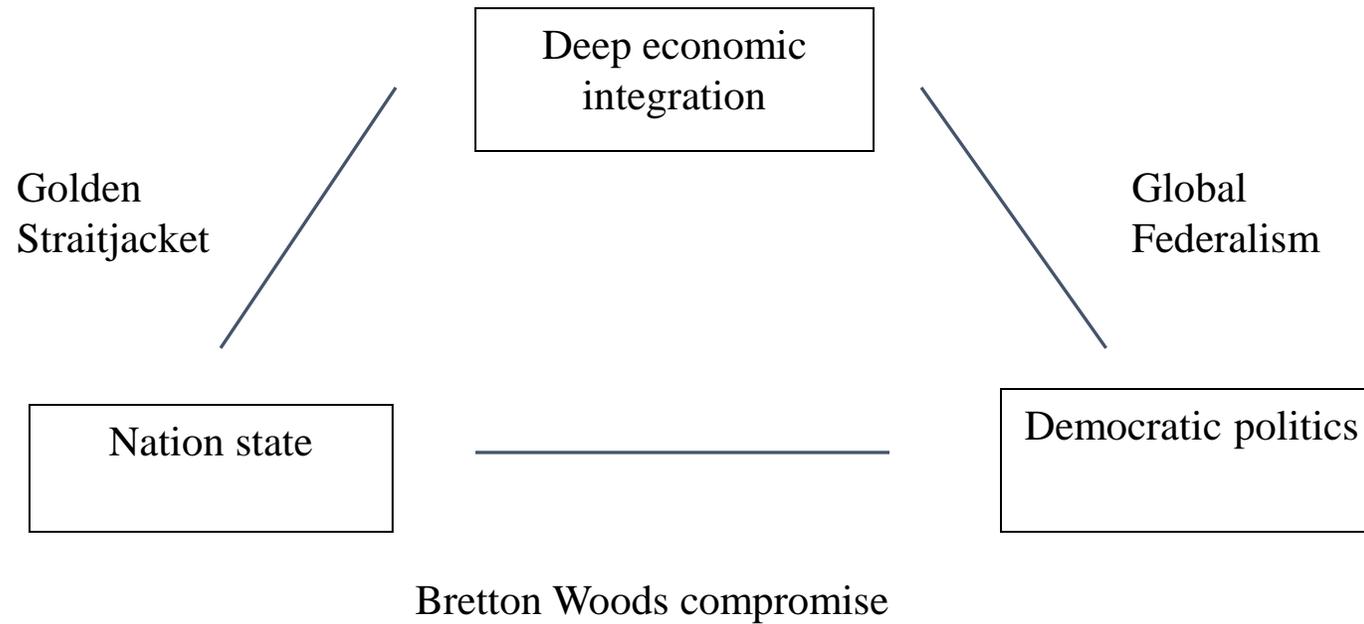
- The state of international relations
 - Russia's aggression against Ukraine shows the tragic threats nationalist ideas pose to international peace and security
 - The rhetoric of competitiveness and nationalist policies
 - The nationalist hoax: global challenges and local powers

«Anche le guerre diventeranno più rare, finché esse non scompaiano del tutto, nel giorno in cui sia per sempre fugato dal cuore e dalla mente degli uomini **l'idolo immondo dello Stato sovrano**»

« Even wars will become rarer, until they disappear completely, on the day when **the filthy idol of the sovereign state** will be banished forever from the hearts and minds of men»

Luigi Einaudi («Il mito dello Stato sovrano», in *Risorgimento liberale*, 1945)

The political trilemma of the world economy (Dani Rodrik, 2011)



Pick two, any two

Where next? The argument for global federalism

- Technological progress
- World appetite for gains from integration
- Attachment to democratic rights

The Covid-19 pandemic and Italian universities

- The **Covid-19 pandemic** has destroyed lives, jobs and businesses throughout Italy. To avoid a long-term socio-economic crisis, **extraordinary measures** have been taken to accompany the recovery and generate conditions for sustainable development.
- The **investments made by the European Union (NGEU)** can help this regeneration, by giving an opportunity to increase the environmental and social sustainability of production systems, especially in disadvantaged areas.
- But the availability of financial resources is not a sufficient condition: the **capacity of local and regional communities to absorb the investment** is limited, as evidenced by the experience of European structural funds.
- Who will be able to identify these opportunities, transforming them into projects with which to feed post-pandemic regeneration strategies?
- **Can Italian universities help regenerate local and regional economies**, particularly in the country's inner areas and urban suburbs?

The Covid-19 pandemic: learning from our mistakes

- Critical assessment of the pandemic crisis, based on the principles of the Global Preparedness Monitoring Board
 - responsible leadership;
 - engaged citizenship;
 - strong and agile systems for health security;
 - sustained investment;
 - robust global governance of preparedness.

Next Generation EU and the social role of universities

- Using the National Plan for Recovery and Resilience to reorganize the role of universities in the social diffusion of knowledge and creative capabilities
 - A DG-Reform programme aimed at changing regulations and incentives
 - Strengthening university staff (knowledge exchange managers, statistical offices, communication offices...)
 - Reforming the system of higher technical education and PhD schools
 - Reorganising the system of 'knowledge intermediaries' between universities, firms and other partners
 - International competence centres on key enabling technologies
 - Local innovation eco-systems, based on regional specialisations, with a particular attention to left-behind regions

Specific initiatives for 'left-behind' regions

- Universities can play an important role in fighting territorial inequalities
 - Attracting students through work experience opportunities (universities as social laboratories of creativity, connected to local specificities)
 - Organizing long-life education in cooperation with the school systems, so as to address new learning needs (the digital transformation)
 - Cooperating with the civil society, the business community and local public administration to address societal challenges
 - Programmes to repopulate inner areas, creating new work opportunities
- This requires that all universities are endowed with specific resources for their social initiatives, with a particular attention to disadvantaged regions
 - The opposite of what implied by the rethoric of competition among excellence centres

Sustainable development, social justice
and international openness: the
strategic agenda of the University of
L'Aquila

Social justice, sustainable development and international openness: The strategic agenda of the University of L'Aquila

- Scenario: the future of the University of L'Aquila after the 2009 earthquake
- Participatory building of the University of L'Aquila's strategic plan
- The University of L'Aquila as a laboratory of social innovation
- The University of L'Aquila's commitment to sustainable development and social justice
- The system of control indicators of the University Strategic Plan
- A new metrics for the social impact of universities

Scenario: the future of the University of L'Aquila after the 2009 earthquake

- The situation of the Italian university system
 - Public spending cuts
 - Aging of staff
 - Regulatory constraints on the expansion of the educational offer
- Local problems
 - The material and immaterial reconstruction
 - The difficulties of the economic and social recovery in an internal area of the South
- The challenges
 - How to attract students and teachers?
 - How to respond to the new training needs imposed by the digital revolution?
 - How to combine physical reconstruction, sustainable economic development and social justice?
 - How to counter the wave of rejection against international integration?

Scenario: the future of the University of L'Aquila after the 2009 earthquake

- The opportunities to be seized
 - The OECD Report: *Policy Making after Disasters: Helping Regions Become Resilient. The case of Post-earthquake Abruzzo* (2013)
 - The strategy for L'Aquila
 1. City of knowledge;
 2. Smart city;
 3. City of creativity;
 4. Open and inclusive city.
 - The Gran Sasso Science Institute
 - The Re-Start programme: 4% of the funds for physical reconstruction earmarked for economic and social development projects
 - The National Plan for Recovery and Resilience and the Complementary Fund for the areas hit by the 2016-17 earthquake
 - The new cycle of European cohesion policies

Participatory building of the University of L'Aquila's strategic plan

- Strategic guide-lines: a vision for the future
- Specific projects with measurable and verifiable objectives
- Consultation of the active forces of the local community
 - To question the way in which the University carries out its work
 - To discuss and share a project for the economic and social revitalization of the territory
 - To build together a system of progress indicators, to be used to verify the extent of the changes that we will be able to make

The University of L'Aquila as a laboratory of social innovation

- The University should be "understood as a **laboratory of creativity**, which becomes an **active agent of local development**, enhancing its own **endowment of skills**, putting it **at the service of the community** and training its young people (students and researchers) in the ability to **undertake new initiatives in cultural, economic and social fields.**"
(Strategic guidelines of the University of L'Aquila 2014-2019)
- **Work-training experiences of students** as a factor of attraction for the University

The University of L'Aquila's commitment to sustainable development and social justice: chapter 3 of the 2020-25 Strategic Plan

1. **Health and wellness: *Taking care of all people***
2. **Respect for the natural environment: *A commitment to justice between generations***
3. **Knowledge exchange and sustainable development: *Connecting local systems to global innovation networks***
4. **Culture and territory: *A local identity open to the world***
5. **Reduction of inequalities: *Tackling obstacles to the "full development of the human person"***
6. **International cooperation and migration, between territory and development: *A horizon of peaceful coexistence for the human community***
7. **Internationalization and cooperation in training activities: *Building together new paths for the dissemination of knowledge***

The system of control indicators of the University Strategic Plan

- **Implementation indicators**, relating to the progress of actions planned but not yet completed;
- **Outcome indicators**, relating to the final result of the planned actions, limited to what is most strictly dependent on our activity;
- **Social impact indicators**, relating to the effectiveness of our activities, which is also heavily affected by external factors beyond our control.

A new metric for the social impact of universities

- What is it for?
 - **Strategic management:** Clarify the desired goal to those who govern the actions of universities and to the subjects to whom they are aimed
 - **Social accountability:** Motivate and make the intervention monitorable and promote public debate, extracting information from all participants
 - **Impact assessment:** Measure the expected and actual results with respect to their starting point, offering inputs for impact evaluations conducted with appropriate statistical methods
- What is it *not* for?
 - To give **rewards and penalties**
 - To compile **rankings** of universities
 - To regulate the distribution of **financial resources**

A new metric for the social impact of universities: goals

1. Ability to **attract students** and **contrast inequalities in the fruition and quality of university studies**
2. **Awareness by students** of the social and cultural context, of their constitutional rights / duties and of the social impact of each discipline
3. **Dignity of work and its autonomy**, within universities and supplier and partner companies
4. **Environmental sustainability** of the activities of universities and their supplier and partner companies
5. **Social dissemination of knowledge and innovative and creative skills**
6. Quality and universal accessibility of fundamental **social services** and the **environment** in the territory or in other communities with which the University interacts
7. **Awareness, skills and role of the population** regarding **innovations** in research and culture
8. Awareness and exercise by the population of **constitutional rights / duties to protect social justice**

The new vision of knowledge sharing in the Italian university and research system

A new approach adopted by the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR)

Fields of action

Intellectual and industrial property valorisation (patents, plant varieties and other products);

Academic entrepreneurship (e.g. spin-off and start-up companies);

Technology transfer structures and other Third mission intermediaries (e.g. technology transfer offices, incubators, science and technology parks, consortia and associations for Third mission);

Production and management of artistic and cultural heritage (e.g. museum poles, archaeological excavations, music activities, historical buildings and archives, historical libraries, theatres and sports facilities);

Clinical experimentations and health protection (e.g. clinical trials, studies on medical devices, non-interventional studies, patients' empowerment initiatives, biobanks, veterinary clinics, information and prevention days, screening and awareness campaigns);

Lifelong learning and open education (e.g. continuous education courses, Continuing Medical Education courses, MOOCs);

Public Engagement (community events, science popularization, citizen science interaction with schools)

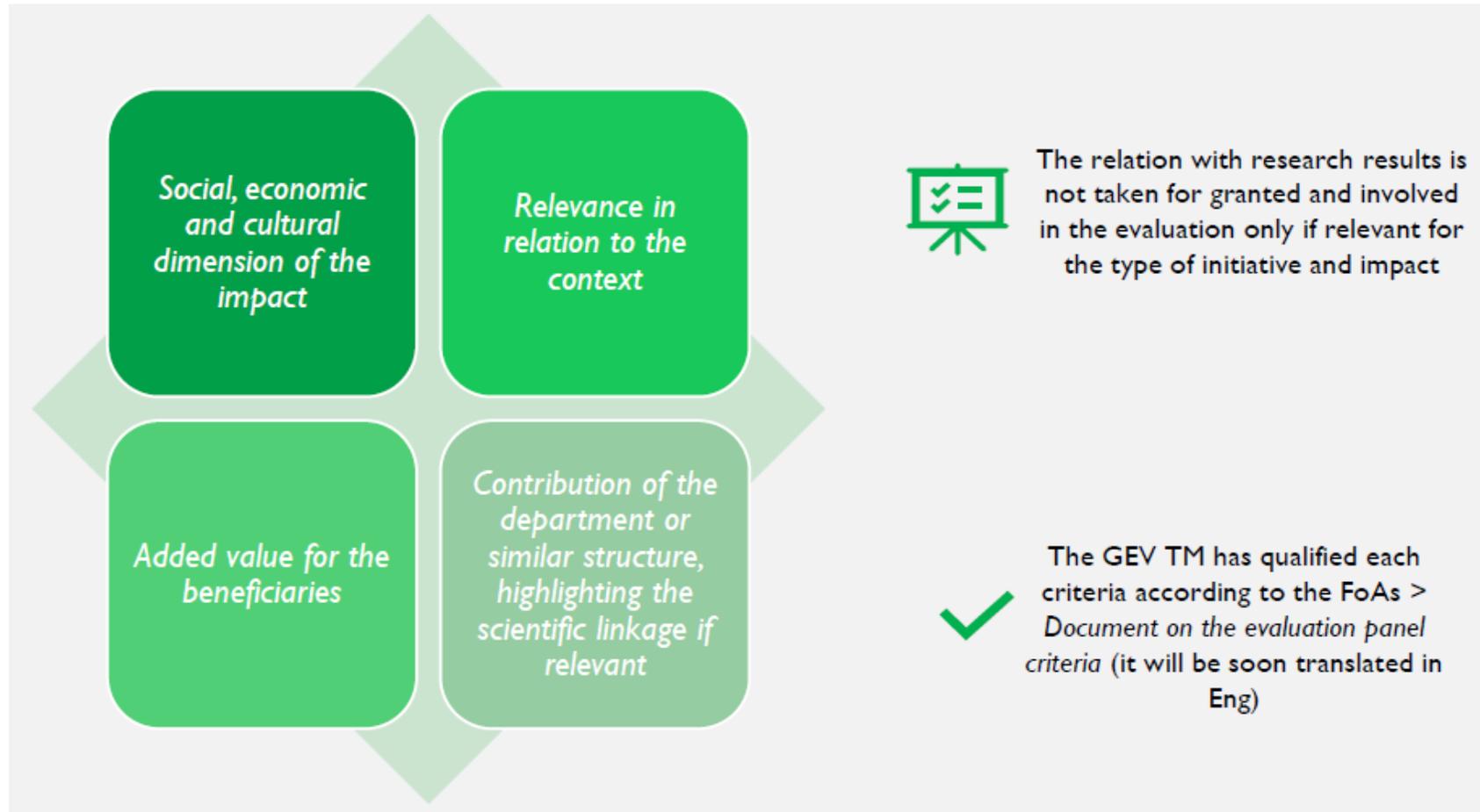
Production of public goods and policy instruments for inclusion (e.g. public policy making/formulation, local development and urban regeneration programs, participatory democracy initiatives, consensus conferences, citizen panels);

Innovative tools to support Open Science;

Activities related to the UN 2030 Agenda for Sustainable Development Goals.

A new approach adopted by the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR)

Evaluation criteria



ITACON Project

Improving the system of knowledge exchange and collaboration (KEC) between universities and society in Italy

Outcome 1

- Developing, among the stakeholders, a shared, multi-faceted vision of KEC, including the determinants of its successes (and failures) to remove barriers and boost opportunities

Outcome 2

- Achieving, among stakeholders and authorities, an agreement on a set of evidence-based policy reform options to boost KEC impact on society

Outcome 3

- Empowering authorities with a ‘toolbox’ of new regulatory elements and measures, including the design of new professional profiles for KEC, to improve cooperation between HEIs, businesses, public authorities, and citizens

The Knowledge Exchange Framework (KEF) in the United Kingdom

- Separate exercise from REF (England only); first results published Q1 2021
- Focus on processes of knowledge exchange broadly defined
- Unit of assessment is whole institution
- Institutions clustered to compare like with like
- Largely focussed on metrics and indicators
- Assessment in seven perspectives on knowledge exchange
- Currently not associated with funding

OECD MSME WEEK



- The OECD Entrepreneurship Education Collaboration and Engagement (EECOLE) network
 - EECOLE connects higher education institutions (HEIs) with **business, finance, government at different levels, and civil society**
 - The aim is to **promote entrepreneurship education and skills** and make HEIs drivers of **inclusiveness and sustainability**.
- Core priorities include
 - **Youth** – supporting young people in the post-pandemic.
 - **Mainstreaming entrepreneurship education and skills**. EECOLE will promote access to entrepreneurship teaching and learning opportunities, in all HEIs.
 - **Contributing to the post-COVID recovery**. EECOLE will leverage on HEIs as source of information and intelligence to identify investment opportunities that can make regions and cities greener and more inclusive, reflecting SDGs.
 - **Strengthening the link between research and innovation**. EECOLE will promote HEIs' knowledge exchange and collaboration activities with their own ecosystems, to connect research capabilities, innovation needs and business development in all regions.

The role of universities for disaster resilience

Civic universities in vulnerable areas

- In areas vulnerable to natural and anthropogenic disasters civic universities can disseminate knowledge, promote social innovation and connect local and foreign businesses, public institutions and communities.
- Public-private cooperation is essential not only for urban renewal, but also for the regeneration of peripheral areas.
- For example, a successful reconstruction strategy for areas affected by natural disasters should aim to attract internal and foreign migrants and enterprises, so as to counter demographic decline and regenerate the foundations of economic and social development.
- In this context, public-private cooperation is necessary to create favourable conditions for investment and immigration.

Disaster resilience: learning from our mistakes

- Critical assessment of the reconstruction process after the 2009 earthquake, based on the principles of the Sendai Framework for Disaster Risk Reduction
 - Understanding disaster risk
 - Strengthening disaster governance
 - Investing in disaster risk reduction and preparedness for effective response and resilience
 - «Build Back Better» in recovery, rehabilitation and reconstruction

Integrating the disaster experience into future governance

- Digital technologies can play an important role in deepening our understanding of disaster risk, vulnerability and exposure.
- Moreover, they can be used to improve the quality of business strategies and public policies for disaster preparedness, resilience and reconstruction.
- Civic universities can play a fundamental role in this domain
 - The Open Territories project: <https://territoriaperti.univaq.it/>
 - High-Performance Computing for Disaster Resilience (HPC4DR): a competence centre connecting eight universities and four national research centres operating in regions exposed to natural disasters

«Territori Aperti»

Data, knowledge and labour for the progress of areas affected by natural disasters

- Interdisciplinary Center for Documentation, Training and Research
 - Prevention and management of natural disasters
 - Reconstruction and development of the affected areas
- An integrated **information system** open to social sharing
- **Training and communication** activities
- **Research**: an international network of skills on the sustainable development of territories hit by natural disasters

«Territori Aperti» Information System

- “Territori Aperti” makes the wealth of data and information on natural disasters and reconstruction processes available to citizens, businesses, social organizations and institutions.
- The information system is integrated into the European *SoBigData network*, in order to apply the most advanced technologies for the analysis and social use of data.
- Data analysis technologies used in the project will allow the activation of user communities, who will thus be able to improve their knowledge and participate more effectively in political decisions.

Training

- “Territori Aperti” works in the training of local authorities’ staff for the good management of emergencies and the planning processes of territories exposed to the risk of natural disasters or characterized by other forms of socio-economic fragility:
- Two main actions:
 - Master course in post-disaster technical-administrative management for local authorities
 - A Toolkit comparing good and bad practices in disaster prevention, management and reconstruction

Research: an international network of skills on the sustainable development of territories hit by natural disasters

- Ethical and legal aspects of data processing
- New technologies for data collection, preparation and analysis
- Advanced data visualization techniques
- Theoretical models and empirical analyses
 - Economic and social issues
 - Spatial planning issues
 - Health issues

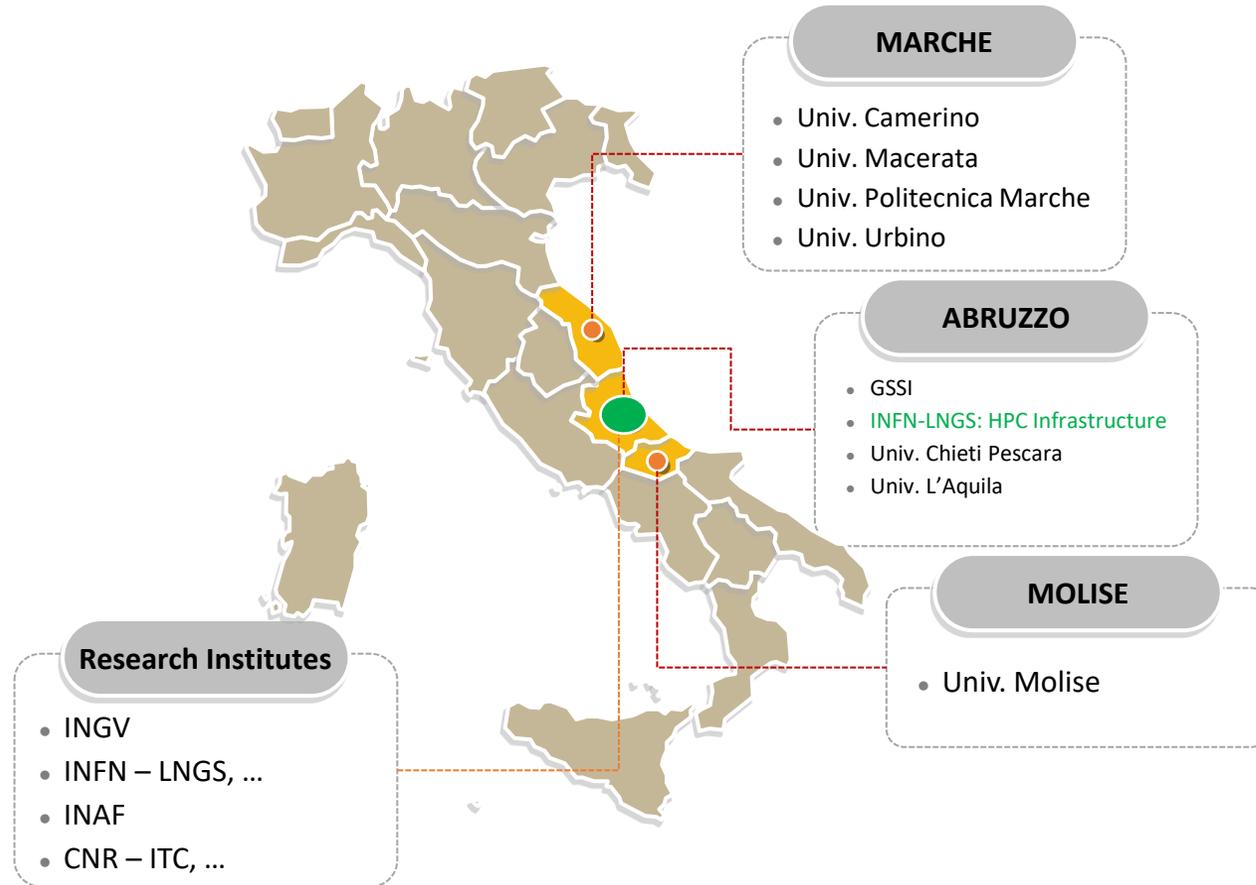
High-Performance Computing for Disaster Resilience (HPC4DR): Strategic Framework

- The European Digital Strategy
 - High Performance Computing: EuroHPC Joint Undertaking
 - European Data Strategy: the Power of Data
 - Destination Earth: a digital 'twin' of the Earth to better understand its health, natural disasters and climate change
- The Sendai Framework for Disaster Risk Reduction
- The UN Sustainable Development Goals
- The European Green Deal
- Next Generation EU

Project Architecture

- **Resources**
 - HPC4DR infrastructure, connected to the CINECA *Leonardo* hub in Bologna
 - Big data made available by the digital transformation
 - Human resources with specific HPC skills
- A **value chain** organized in four stages based on the Sendai Framework principles:
 1. Hazard and probability of natural and anthropogenic disasters
 2. Vulnerability and exposure to the impact of disasters
 3. Preparedness and resilience to disasters
 4. Reconstruction and sustainable development in areas hit by disasters
- Each stage uses **HPC** resources **directly and indirectly** benefits from the better-quality inputs produced by the upstream stages of the supply chain through HPC
- The ultimate goal is to increase the **resilience of local systems to natural and anthropogenic disasters**, providing citizens, businesses and public institutions with reliable scenarios and simulations

HPC4DR PARTNERSHIP



Social impact of the HPC4DR project

- Strengthening the contribution of universities and research centers to societal progress (Quadruple Helix approach)
- Citizens and civil society
 - Inclusiveness, resilience and sustainable development
 - Network among small communities more exposed to the risk of disasters
- Enterprises
 - Better risk assessment for the insurance and financial sector
 - Business opportunities for the resilience of local communities
- Policy-makers
 - Disaster risk reduction strategies
 - Data-driven framework to adapt general guidelines to specific contexts
 - Environmental impact assessment of reconstruction strategies

Concluding remarks: the University of L'Aquila as a «civic university»

- The role of «civic universities» in the social diffusion of knowledge
 - Beyond the paradigm of a «third mission» based on (unilateral) technology transfer
 - Knowledge co-creation and reciprocal learning among universities, public institutions, social organizations and the business community
- The contribution of «civic universities» to the attainment of Sustainable Development Goals
 - Social and environmental justice: contrasting inequalities across individuals, territories and generations
 - International openness:
 - Connecting local systems to global networks of knowledge diffusion
 - Contrasting identitarian obsessions and promoting the ethical, economic and social value of globalization
 - Promoting international cooperation, peace and strong democratic institutions