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***Labour Market Impacts of
Natural and Environmental Disasters***

**MANAGING AND PREVENTING NATURAL
(AND ENVIRONMENTAL) DISASTERS:
THE ROLE OF INDUSTRIAL RELATIONS
SOME REFLECTIONS ON THE ITALIAN CASE**

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FRAMING THE ISSUE (1)

THE MANAGEMENT AND PREVENTION OF **NATURAL DISASTERS**

☞ *a traditional view:*

- (1) **FATALISM, SOLIDARITY** (*public opinion*)
- (2) **EMOTIONAL IMPACT, SYMPATHY** (*the media*)
- (3) **UNPREDICTABILITY, IMPOTENCY** (*experts*)

FRAMING THE ISSUE (2)

THE MANAGEMENT AND PREVENTION OF ENVIRONMENTAL DISASTERS

☞ *a traditional view:*

- (1) **ANGER, REBELLION** (*public opinion*)
- (2) **BLAME, LIABILITY, PRO-ACTION** (*the media*)
- (3) **PREDICTABILITY, PREVENTION** (*experts*)

FRAMING THE ISSUE (3)

👉 *the (negative) consequences of this traditional view:*

NATURAL DISASTERS

versus

ENVIRONMENTAL DISASTERS

Fatalism, solidarity, sympathy are all important factors, but they lead to the idea of impotence in the event of **natural disasters**, due to their unpredictability.

👉 *any possible new view?*

👉 *any scope for prevention also in case of natural disasters?*

👉 *any role of labour law and industrial relations?*

ARE NATURAL DISASTERS REALLY UNPREDICTABLE?

Whereas **ENVIRONMENTAL DISASTERS** are caused from human behaviour, **NATURAL DISASTERS** are unpredictable:

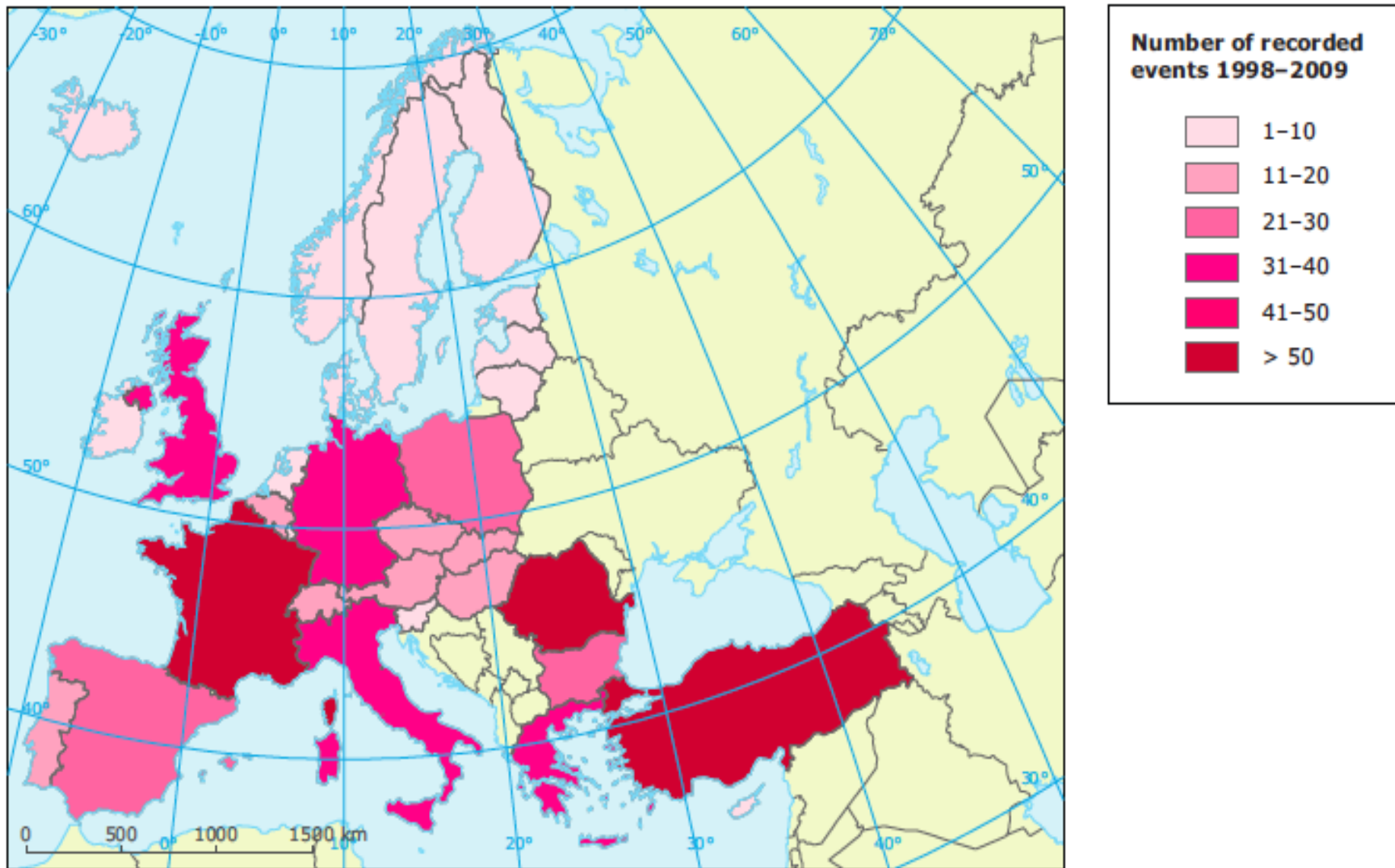
- this is **undoubtedly true for every single NATURAL DISASTER**: (1) we don't know "where", "when" and "how"; (2) we don't know the concrete consequences for the security/integrity of the people, buildings, facilities, economies and local communities affected;
- however, this is **less true in the long run**: (1) we already know that some areas / countries are more affected than others; (2) we can rely on the experience gained on the occasion of previous disasters; (3) we can already image the possible consequences of new disasters for people, buildings, facilities, economies and local communities;
- some **NATURAL DISASTERS** are **caused (at least indirectly) from human behaviour due to technological, demographic and socio-economic changes** that give rise to a **huge impact on the surrounding environment** and to some **geophysical / hydrometeorological changes** at least in a long run.

LOOKING AT THE PAST TO IMAGINE THE FUTURE

According to a recent Report from the **EUROPEAN ENVIRONMENTAL AGENCY** (*Mapping the Impacts of Natural Hazards and Technological Accidents: An Overview of the Last Decade*):

- Europe (and **Italy** in particular) is experiencing **an increasing number of natural and environmental disasters** that are caused by a combination of changes in its physical, technological and socioeconomic system;
- for the period 1998-2009, Europe reported **576 disasters** due to natural hazards causing some **100,000 fatalities** and as much as **EUR 150 billion in overall losses**;
- for the period 1998-2009 **more than 11 million people** (out of a population of 590 million in the EEA member countries) **were somehow affected by disasters caused by natural hazards**;
- the impact of natural hazards in terms of fatalities is not uniform throughout Europe, with **France/Italy reporting more than 20,000 fatalities** each, followed by **Turkey (18,000)** and **Spain (15,000)**.

THE NUMBER OF DISASTROUS EVENTS BY COUNTRY (1998-2009)



Source: ETC-LUSI based on EM-DAT, 2010.

AN OVERVIEW OF THE MAJOR EVENTS IN EUROPE (1998-2009)

Hazard type	Recorded events	Number of fatalities	Overall losses (EUR billion)
Storm	155	729	44.338
Extreme temperature events	101	77 551	9.962
Forest fires	35	191	6.917
Drought	8	0	4.940
Flood	213	1 126	52.173
Snow avalanche	8	130	0.742
Landslide	9	212	0.551
Earthquake	46	18 864	29.205
Volcano	1	0	0.004
Oil spills	9	n/a	No comprehensive data available ^(a)
Industrial accidents	339	169	No comprehensive data available ^(b)
Toxic spills	4	n/a	No comprehensive data available ^(c)
Total	928	98 972	148.831

Note: ^(a) Estimation is between EUR 500 and EUR 500 000 per tonne of oil spilled.

^(b) Costs for major events reported in Table 12.1 aggregately amount to more than EUR 3.7 billion.

^(c) Costs for one particular toxic spill amount to EUR 377 million, see Chapter 13.

Source: EM-DAT, 2010; EMSA, 2010; MARS, 2010.

ALSO “NATURAL DISTASTERS” ARE “PREDICTABLE”

- we don't know “where”, “when” and “how”, **but we know they will happen, also more than once**
- we already know the possible **consequences** for the security and integrity of the people, buildings, facilities, economies and local communities that will be affected

👉 the term “**NATURAL DISASTER**” is not entirely correct: **disasters happen only from a human and not from a natural perspective**

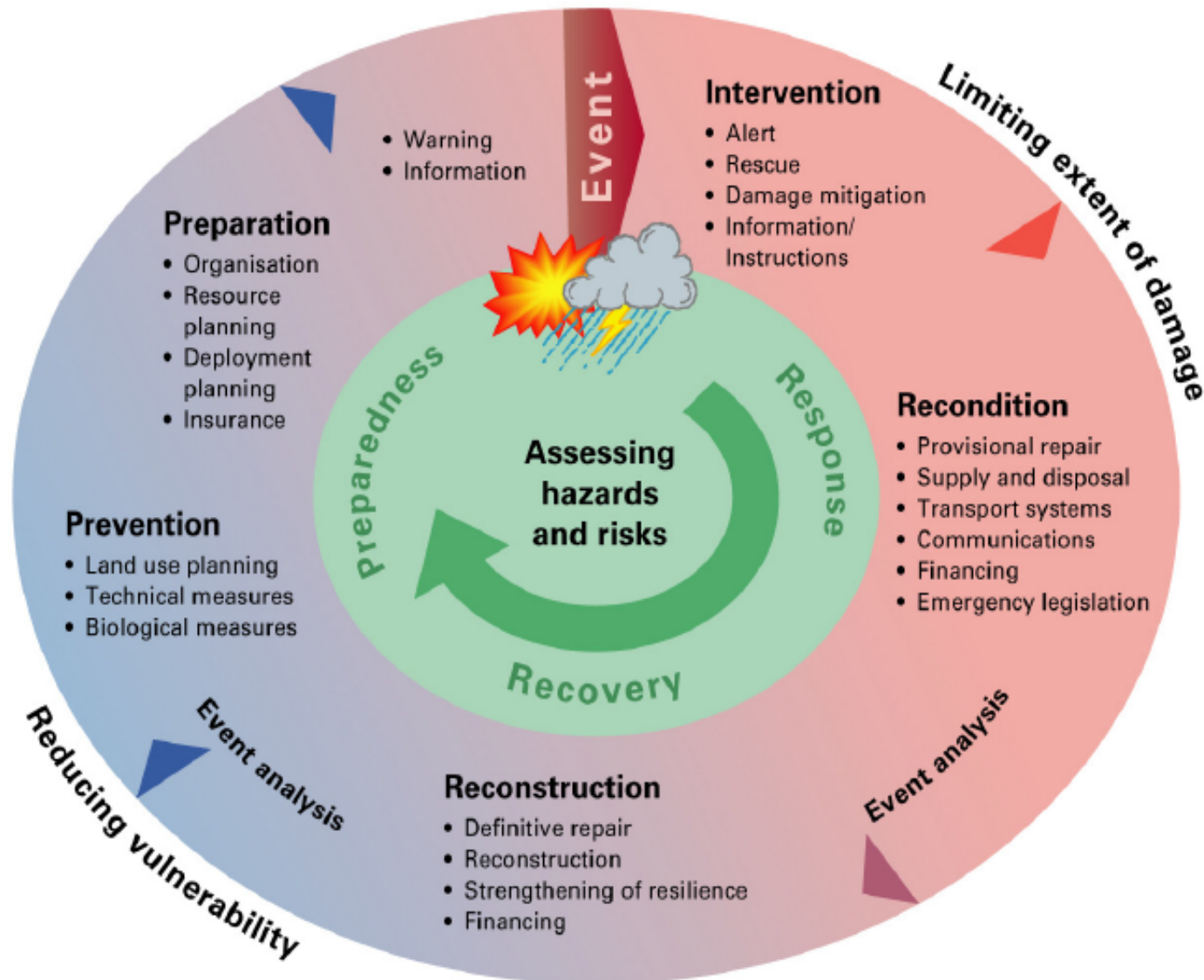
opposed to environmental / technological hazards, natural hazards do not usually cause any harm to nature as **they are natural processes**. If humans are affected the term “disaster” is used. Therefore, it is the natural hazard that causes the human disaster
(EEA Technical Report n. 13/2010, p. 18).

WHICH PRACTICAL CONSEQUENCES?

- If **NATURAL DISASTERS** are also “**PREDICTABLE**” as **NATURAL PHENOMENA** and if, at least in some cases, their **CONSEQUENCES FOR HUMANS** are exacerbated (directly or indirectly) by **HUMAN BEHAVIOUR** in terms of technological, industrial and socio-economic changes, it seems clear that **we can no longer continue to speak of fate and fatalism** as public opinion and the media do.
- National and local **institutions** and **experts** must work in order to **prevent** if not natural disasters (for instance, by opening up to the **green economy** and **sustainable behaviour**) at least **their consequences on people, industries, economy, local communities**, etc. and not limit their attention to **emergency management** and **recovery**.

 **THROUGH THIS “PRO-ACTIVE PERSPECTIVE” I SEE THE SCOPE FOR A MAIN CONTRIBUTION FROM THE INDUSTRIAL RELATIONS SYSTEM**

THE CYCLE OF INTEGRATED RISK MANAGEMENT: NO ROLE FOR INDUSTRIAL RELATIONS AT ALL?



(source: EEA Technical Report n. 13/2010, p. 22)

RISK MANAGEMENT IN ITALY: A PASSIVE APPROACH

ITALY - as any other country at risk of relevant **NATURAL (AND ENVIRONMENTAL) DISASTERS** – recognizes rules and procedures aimed at **LIMITING DAMAGE AND ITS EXTENT** through:

- a well consolidated **NATIONAL SYSTEM OF CIVIL PROTECTION**
- **STRUCTURAL AND TECHNICAL MEASURES, RULES AND PROCEDURES AGAINST HAZARDS AND DISASTERS** (land use planning, industrial areas planning, technical measures, biological measures, infrastructures, instructions, communication, information procedures, guidelines, etc.)
- **CAMPAIGNS TO RAISE PUBLIC AWARENESS**
- **EARLY WARNING SYSTEMS AND EVACUATION PROCEDURES**
- various kinds of **SOLIDARITY AND/OR EMERGENCY FUNDS**
- **EMERGENCY LEGISLATION** both at national and local level
- **FRAMEWORK LEGISLATION AT EUROPEAN LEVEL** (es. Eurocode 8 for earthquakes)

LABOUR LAW LEGISLATION: ANY ROLE?

AS FAR AS ITALY LABOUR LAW IS CONCERNED
REGULATIONS PLAY A DOUBLE ROLE REGARDING:

 **HEALTH AND SAFETY**

MEASURES AND PROCEDURES

(emergency and structural procedures to guarantee building security and to protect workers' integrity)

 **WELFARE MEASURES FOR**

EMPLOYERS AND EMPLOYEES

(emergency and structural measures to support workers' income and aid for economic recovery)

HEALTH AND SAFETY MEASURES AT WORK

Two main types of regulatory measures address **the security of facilities and buildings** and the **protection of workers' safety**:

- STRUCTURAL MEASURES:** (a) compliance of structures and facilities must be always and normally checked after any change in the work organization or any emergency/accident; (b) health and safety issues when returning to work must be handled (risk assessment and medical surveillance); (c) prevention or mitigation of the risks arising from such events on one's state of health in the medium and long term must be handled (information, training and risk assessment);

- EMERGENCY MEASURES:** (a) a seismic certificate of compliance must be issued to the employer and then sent to the relevant municipality, after an expert has verified that the facility complies with the safety standards set out by law; (a) emergency and evacuation procedures must be immediately followed and performed.

WELFARE : (A) STRUCTURAL MEASURES

INCOME SUPPORT FOR WORKERS SUCH AS ORDINARY OR EXTRAORDINARY WAGE GUARANTEE FUNDS (duration/amount of the funds are dependent upon the productive sector and the size of the company):

- **ordinary safety-net** measures: **unemployment benefits; ordinary and extraordinary funds; wage guarantee funds; special unemployment schemes** which financially support workers made redundant as a result of collective dismissals; alternative forms of support afforded by autonomous productive sectors and **joint bodies**;
- **In derogation of safety-net** measures: **funding to employers who do not meet the foregoing statutory requirements** extended to those in **self-employment** and in **quasi-subordinate employment; special forms of wage guarantee funds** (*cassa integrazione in deroga*).

WELFARE: (B) AID AND EXTRAORDINARY MEASURES FOR RECOVERY / RECONSTRUCTION

EXTRAORDINARY MEASURES AT NATIONAL / LOCAL / REGIONAL LEVEL:

- acknowledgment of the **state of emergency** in the affected areas;
- **relief for businesses and companies of some legal obligations;**
- **temporary suspension of fiscal obligations** (levies, taxes and contributions to be paid to the State or local authorities);
- **economic incentives and other forms of financial support**, either directly or indirectly (e.g. tax credits and breaks in case of delocalization);
- **emergency job creation programmes;**
- **involvement of local universities and centre of research** by way of financial support to research and the development of businesses located in the areas affected by the seismic event;
- funds to **train or retrain employees** and to **reconvert productive specialization of companies / areas** after the disaster.


WEAKENESSES OF A “PASSIVE APPROACH”

In a context such as the Italian one – aimed at explaining **NATURAL DISASTERS** in terms of **FATE** and **FATALISM** – both **passive measures** and **emergency interventions** show various limits and weaknesses:

- **LOW LEVELS OF COGENCY AND EFFECTIVENESS OF RULES, METHODS AND PROCEDURES;**
- **FAILURE TO CORRECT OR IMPROVE THE 'LEGACY OF THE PAST'** (i.e. deficient spatial / industrial planning in former times);
- **LOW LEVELS OF INVOLVEMENT OF PEOPLE AND COMMUNITIES**
- **MINOR ROLE PLAYED IN DECISION-MAKING BY THE COMMUNITIES POTENTIALLY AFFECTED;**
- **DIFFICULTIES IN CONVERTING DISASTER RISKS FROM AN ORIENTED APPROACH** (damage and its extent) **TO AN INTEGRATED RISK MANAGEMENT APPROACH THAT REDUCES THE VULNERABILITY OF PEOPLE, FACILITIES, INFRASTRUCTURES** (i.e. prevention, preparedness, response and prompt recovery).

THE (NEGATIVE) CASE OF EMILIA ROMAGNA (2012)

The violent quakes that hit **EMILIA ROMAGNA** in May and June 2012 shed light on an innovative aspect in the **MANAGEMENT** and **PREVENTIONS OF FATALITIES AND DAMAGES** during a natural disasters:

 **what was striking about this tragedy was that most of the fatalities were workers who survived the first earthquake, but soon afterwards were being recalled to duty to resume their working activity and commence post-disaster reconstruction**

 **a more effective dialogue between employers and trade unions would have avoided these fatalities**

THE (POSITIVE) CASE OF UMBRIA (1997)

It is the quakes that hit **UMBRIA** in 1997 that can suggest a positive role from a well functioning **INDUSTRIAL RELATIONS SYSTEM** in the **MANAGEMENT** and **PREVENTION OF FATALITIES AND DAMAGE**:

☞ on that occasion, the “**Single Insurance Contribution Payment Certificate**” (*Documento Unico di Regolarità Contributiva*) was issued to ensure that **only employers who comply with anti-seismic regulations and respecting collective regulations laid down in collective agreements were involved in rebuilding**

☞ DURC was intended as a **system of selection of quality companies**, as a tool to single out compliant employers to be engaged in the reconstruction work and safeguard, albeit indirectly, workers and individuals operating in the areas hit by the disaster

☞ **set up by collective bargaining**, this procedure **was promptly implemented through national legislation** and emerged as a major tool against irregular work, especially in the **building sector** where **contracting** and **subcontracting** were widespread phenomena

WHY INVOLVE SOCIAL PARTIES IN THE CYCLE OF INTEGRATED RISK MANAGEMENT?

Involving **SOCIAL PARTIES** in the cycle of integrated risk management can have real positive consequences not only during the **MANAGEMENT** and **RECOVERY** from **THE CRISIS** but also in the crucial phase of **PREVENTION** ensuring:

- **HIGHER LEVELS OF EFFECTIVENESS OF RULES AND PROCEDURES;**
- **HIGHER LEVELS OF INVOLVEMENT OF PEOPLE AND COMMUNITIES IN OVERCOMING THE 'LEGACY OF THE PAST';**
- **A MAJOR CAPACITY TO ANTICIPATE, COPE WITH, RESIST AND RECOVER FROM THE IMPACT OF THE DISASTER;**
- **A CONTRIBUTION TO RESOLVING THE OCCUPATIONAL MISMATCH;**
- **MORE ARTICULATED ANSWERS ACCORDING TO THE SPECIFICITY OF SECTORS / AREAS / ECONOMY HIT BY THE DISASTER;**
- **THE POSSIBILITY TO CONVERT DISASTER RISK FROM AN ORIENTED APPROACH TO AN INTEGRATED RISK MANAGEMENT APPROACH THAT REDUCES THE VULNERABILITY OF PEOPLE, FACILITIES, AND INFRASTRUCTURES.**

INDUSTRIAL RELATIONS AND THE QUALIFICATION SYSTEM FOR BUSINESSES

Recent Italian experience in terms of natural and (environmental) disasters points to **the importance of a well functioning industrial relations system at the time of defining an effective cycle of integrated risk management.** Prompted by social partners in the building sector, the **2008 Consolidated Act on Occupational Health and Safety** moved in that direction, establishing a qualification system for businesses which consists in:

- 👉 **a state-of-the-art selection system for the businesses allowed to operate in a given productive sector** based on specific qualitative, organizational, and safety standards
- 👉 **a qualification system which prevents businesses below certain standards from operating in a certain sector, thus guaranteeing better and more protection to workers** and pointing out their **skills** as the base for any process in terms of **risk management and prevention**