The impact of research and innovation on society as a whole: the Sustainable Development Goals
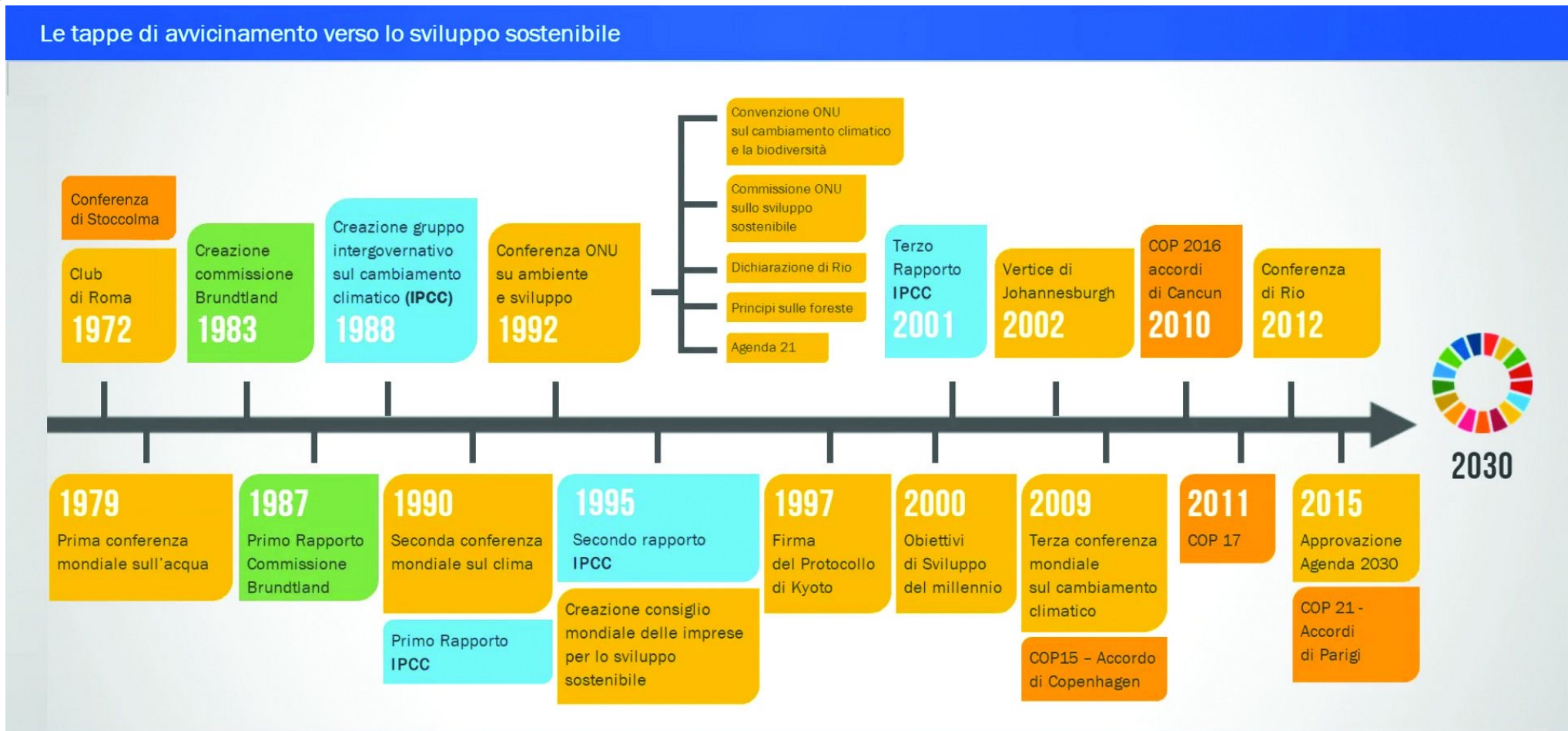
Lucilla Persichetti

Italian Alliance for Sustainable Development, ASviS

www.asvis.it

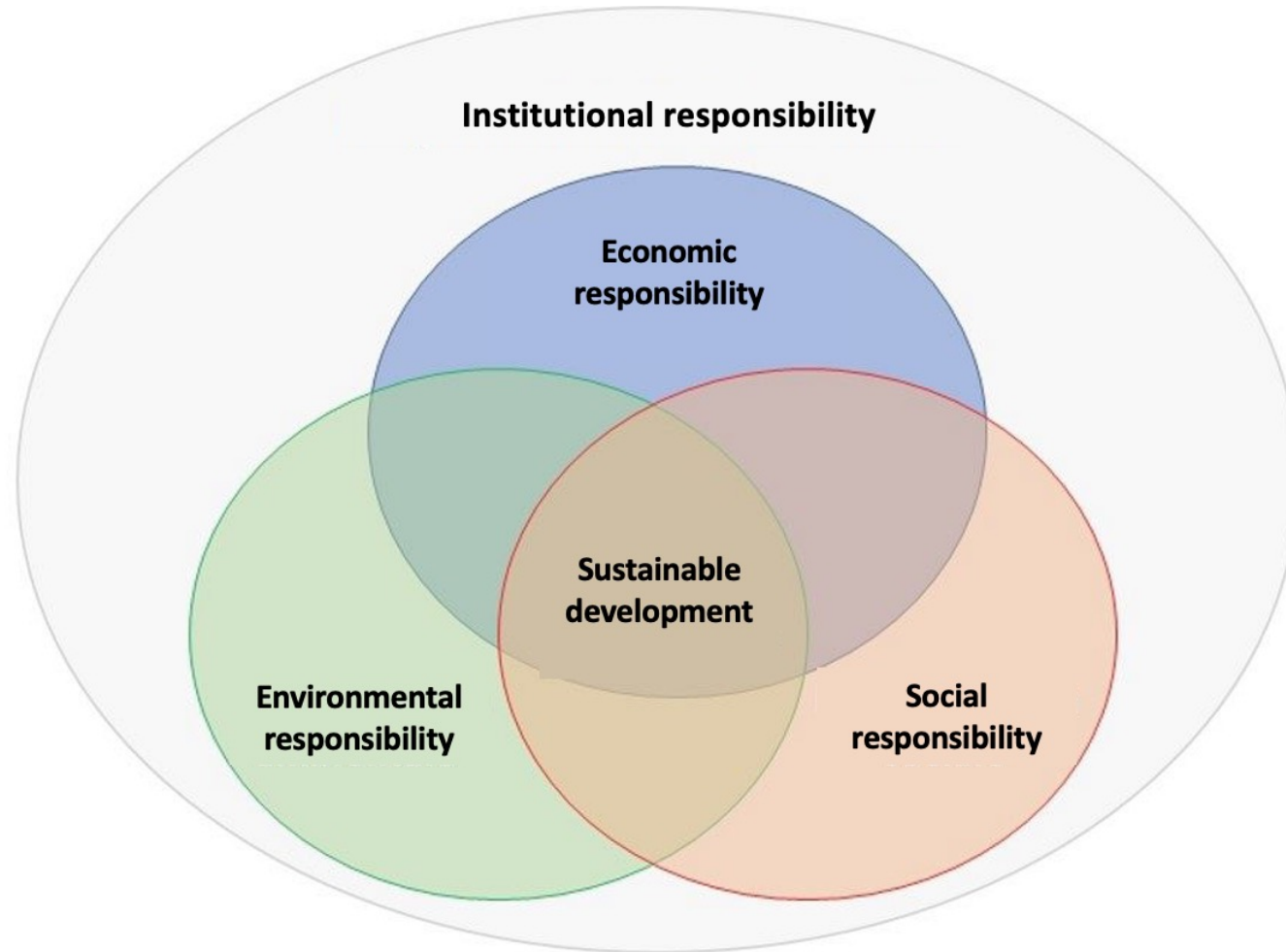Le tappe di avvicinamento verso lo sviluppo sostenibile

"Meeting the needs of the present without compromising the ability of future generations to meet their own needs"
United Nations Brundtland Commission, 1987

"In the long term, economic growth, social cohesion and environmental protection must go hand in hand"
European Commission's proposal to the Gothenburg European Council, 2001

The 2030 Agenda for Sustainable Development

ASViS Alleanza Italiana per lo Sviluppo Sostenibile

The United Nations' Global Agenda and the Sustainable Development Goals (SDGs):
17 Goals
169 Targets
240+ indicators

An integrated vision of development, based on four pillars:
Economy
Society
Environment
Institutions

Three principles: Integration, Universality, Participation

1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS

THE GLOBAL GOALS
For Sustainable Development

1 SCONFIGGERE LA POVERTÀ
2 SCONFIGGERE LA FAME
3 SALUTE E BENESSERE
4 ISTRUZIONE DI QUALITÀ
5 PARITÀ DI GENERE
6 ACQUA PULITA E SERVIZI IGIENICO-SANITARI
7 ENERGIA PULITA E ACCESSIBILE
8 LAVORO DIGNITOSO E CRESCITA ECONOMICA
9 IMPRESE, INNOVAZIONE E INFRASTRUTTURE
10 RIDURRE LE DISUGUAGLIANZE
11 CITTÀ E COMUNITÀ SOSTENIBILI
12 CONSUMO E PRODUZIONE RESPONSABILI
13 LOTTA CONTRO IL CAMBIAMENTO CLIMATICO
14 VITA SOTT'ACQUA
15 VITA SULLA TERRA
16 PACE, GIUSTIZIA E ISTITUZIONI SOLIDE
17 PARTNERSHIP PER GLI OBIETTIVI

"The new Agenda is a promise by leaders to all people worldwide. It is an agenda for people, to end poverty in all its forms, an agenda for the planet, our common home."

Ban Ki-Moon, UN General-Secretary

*"We are determined to take the **bold and transformative steps** which are urgently needed to shift the world onto a sustainable and resilient path. As we embark on this collective journey, we pledge that **no one will be left behind**."*

UN 2030 Agenda

- **CUM + PLECTERE**:
  - Emergency
  - Multiplicity
  - Unity

- **Complex vs. Complicated →**
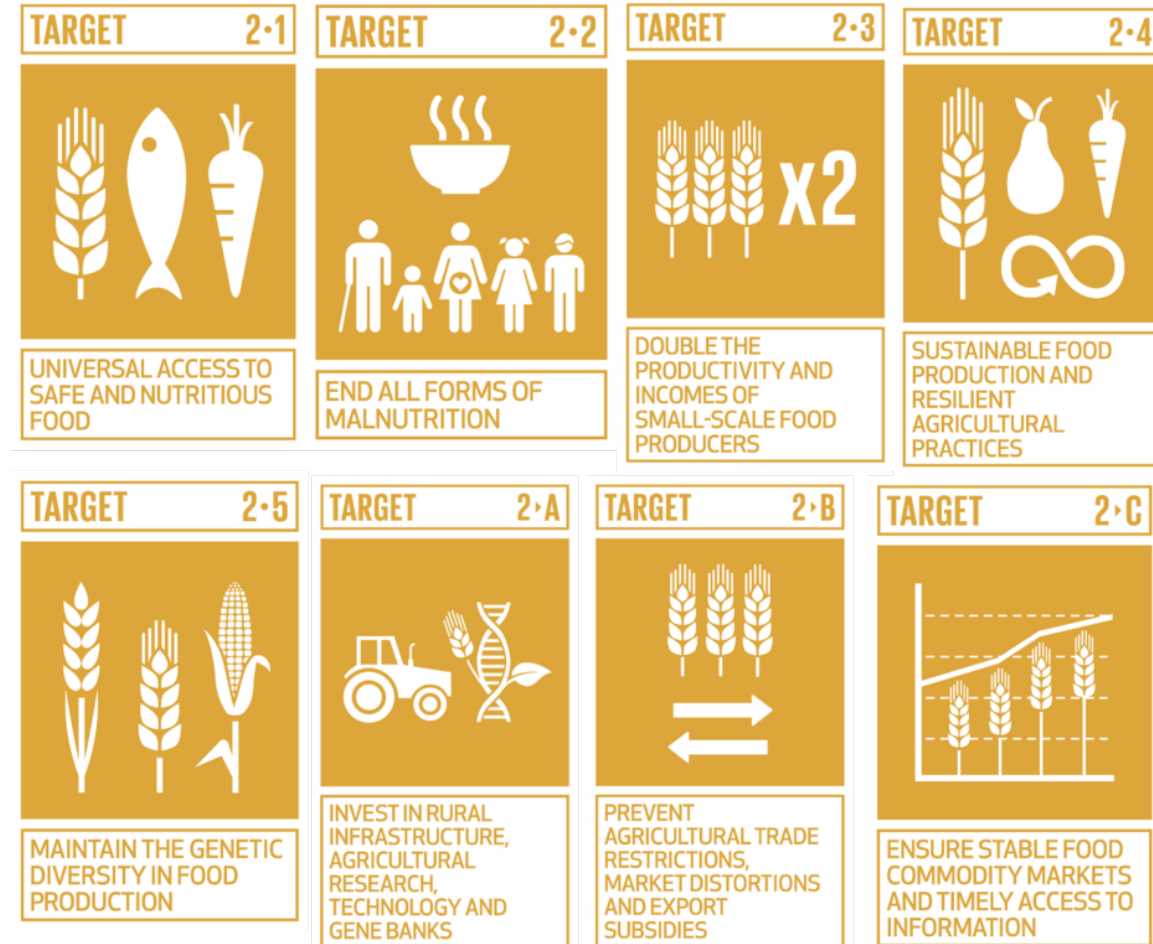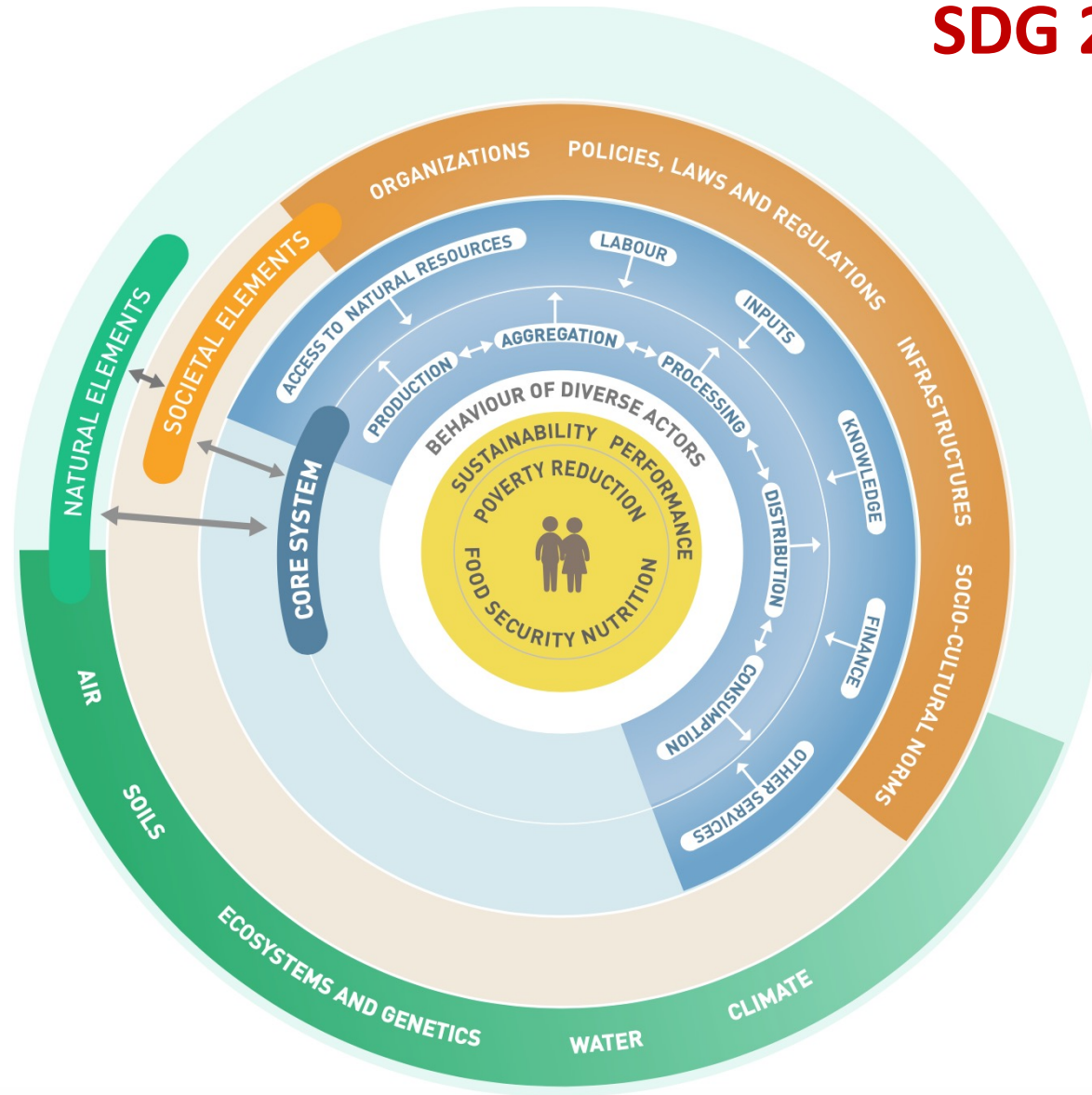 "Complex systems always kick back"

- **Systemic approach**:
  - Multiple causal chains intertwine
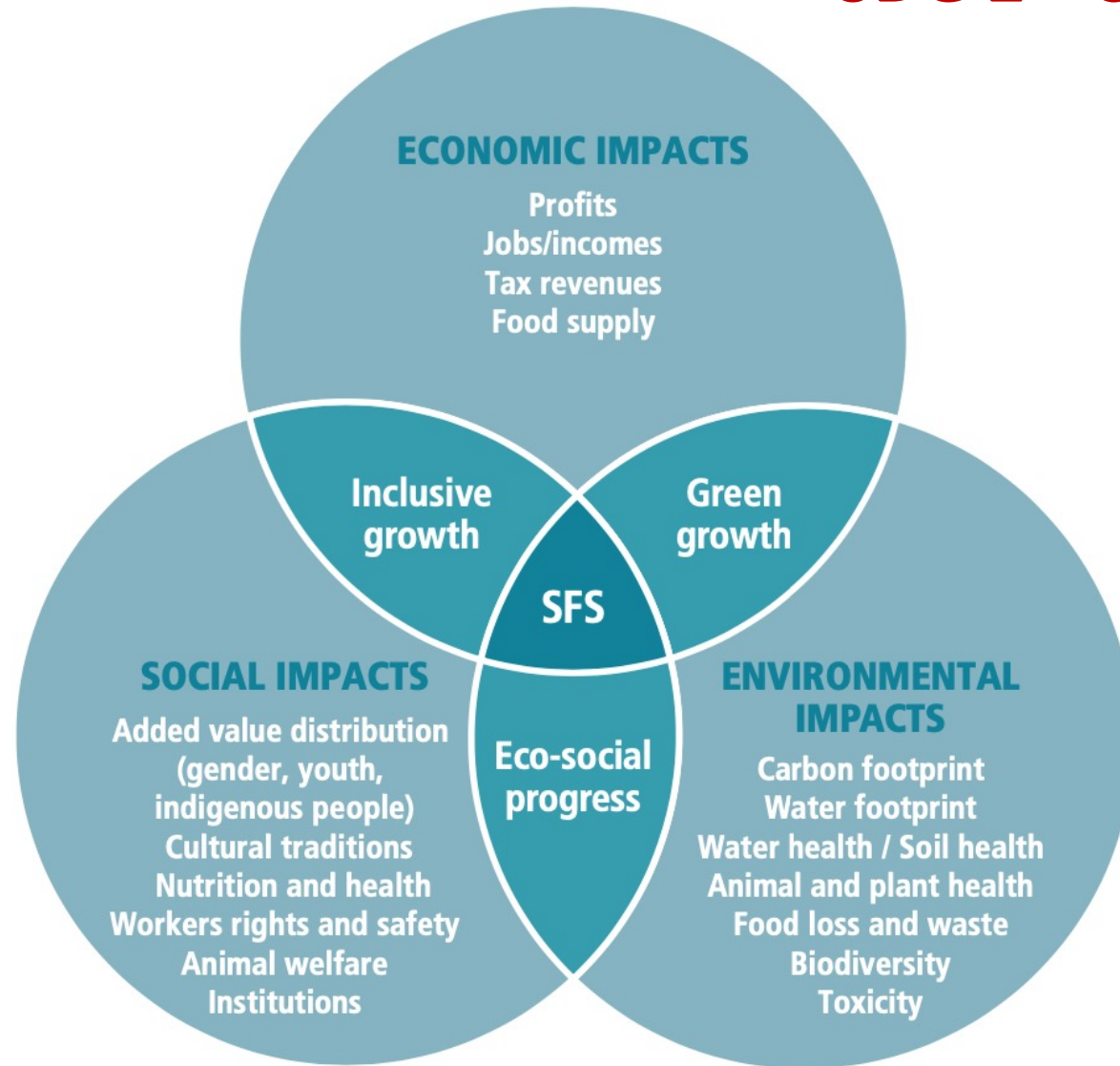 - Causality is circular

- **Food security**
  - Availability
  - Access
  - Utilization
  - Stability
- **Food safety**
- **Improved nutrition**
  - Undernutrition
  - Inadequate vitamins or minerals
  - Overweight
  - Obesity
  - Diet-related noncommunicable diseases
- **Sustainable agriculture**
  - Agricultural productivity
  - Enrivonmental sustainability of agriculture

2 ZERO HUNGER

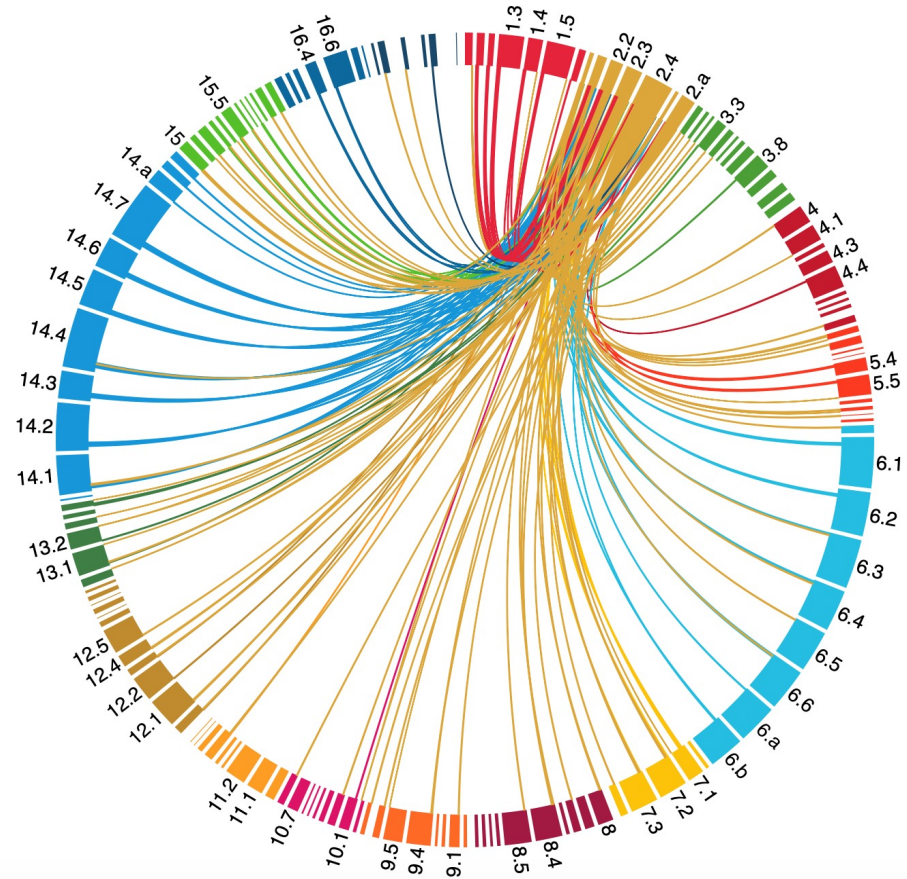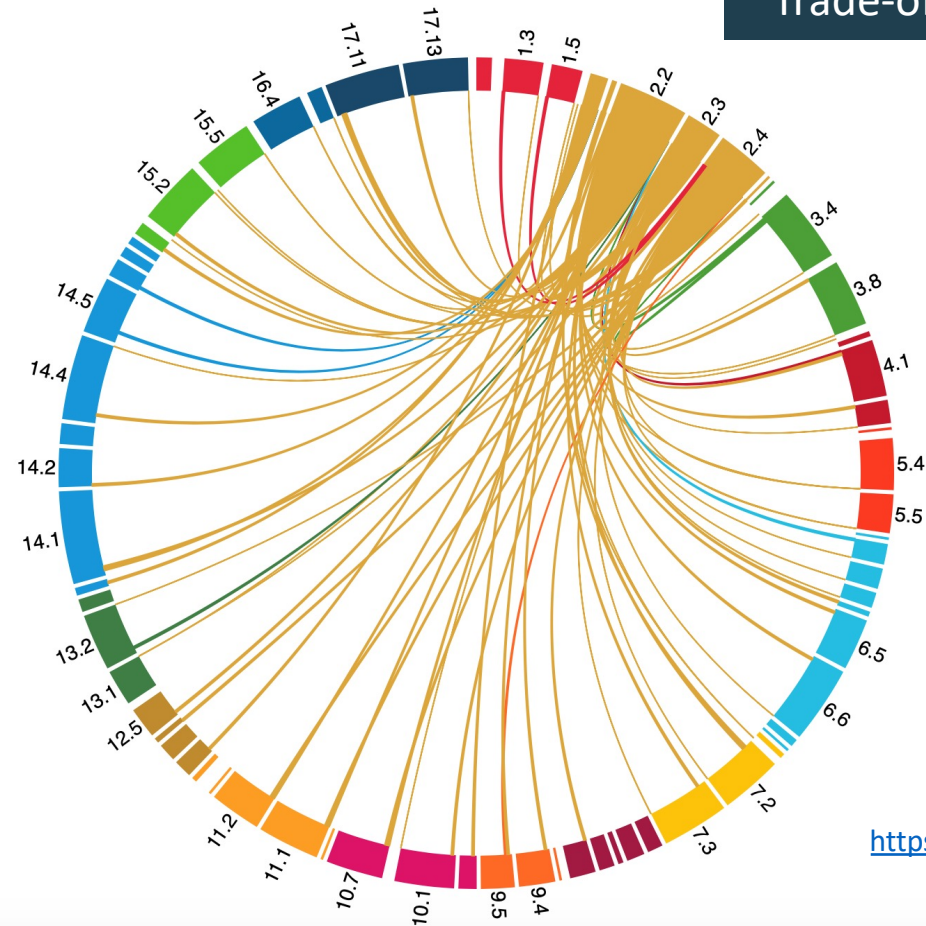**TARGET 2·1** — UNIVERSAL ACCESS TO SAFE AND NUTRITIOUS FOOD

TARGET 2·2 — END ALL FORMS OF MALNUTRITION

TARGET 2·3 — DOUBLE THE PRODUCTIVITY AND INCOMES OF SMALL-SCALE FOOD PRODUCERS

TARGET 2·4 — SUSTAINABLE FOOD PRODUCTION AND RESILIENT AGRICULTURAL PRACTICES

TARGET 2·5 — MAINTAIN THE GENETIC DIVERSITY IN FOOD PRODUCTION

TARGET 2·A — INVEST IN RURAL INFRASTRUCTURE, AGRICULTURAL RESEARCH, TECHNOLOGY AND GENE BANKS

TARGET 2·B — PREVENT AGRICULTURAL TRADE RESTRICTIONS, MARKET DISTORTIONS AND EXPORT SUBSIDIES

TARGET 2·C — ENSURE STABLE FOOD COMMODITY MARKETS AND TIMELY ACCESS TO INFORMATION

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1 SCONFIGGERE LA POVERTÀ | 2 SCONFIGGERE LA FAME | 3 SALUTE E BENESSERE | 4 ISTRUZIONE DI QUALITÀ | 5 PARITÀ DI GENERE | 6 ACQUA PULITA E SERVIZI IGIENICO-SANITARI | 7 ENERGIA PULITA E ACCESSIBILE | 8 LAVORO DIGNITOSO E CRESCITA ECONOMICA | 9 IMPRESE, INNOVAZIONE E INFRASTRUTTURE | 10 RIDURRE LE DISUGUAGLIANZE | 11 CITTÀ E COMUNITÀ SOSTENIBILI | 12 CONSUMO E PRODUZIONE RESPONSABILI | 13 LOTTA CONTRO IL CAMBIAMENTO CLIMATICO | 14 VITA SOTT'ACQUA | 15 VITA SULLA TERRA | 16 PACE, GIUSTIZIA E ISTITUZIONI SOLIDE | 17 PARTNERSHIP PER GLI OBIETTIVI

FAO 2018, Food System Wheel

SDG 2 – Synergies and trade-offs

https://knowsdgs.jrc.ec.europa.eu/interlinkages-visualization

- To achieve the Sustainable Development Goals by 2030, new modalities for development are needed.
- **Innovation**, intended both as new forms of social practice and organization and as improved technological products and processes, is not only an explicit focus of SDG 9 but also a **key enabler of all the SDGs**.
- Considerable progress has been made over the last decade but there are still significant gaps in knowledge and further steps are needed to improve:
  - **Data collection and research**
  - **Science-policy interface**
  - Support **monitoring and review** of the SDGs

For an SDG Impact Assessment tool, see https://sdgimpactassessmenttool.org/en-gb