# GMOs: Addressing Concerns & Issues Through Communication

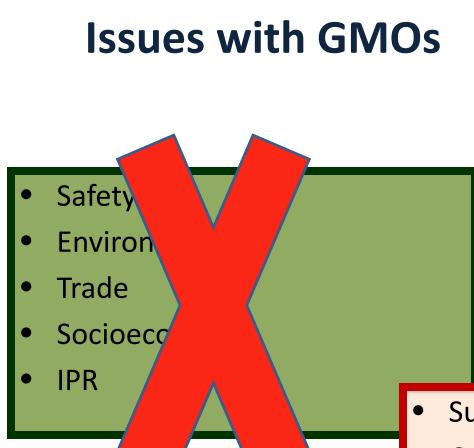
Mahaletchumy Arujanan Executive Director

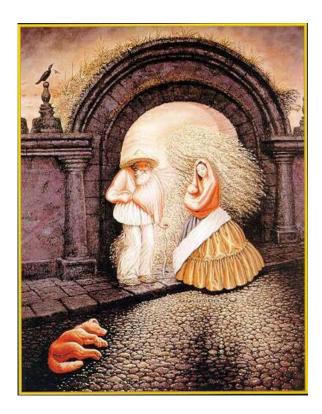
Malaysian Biotechnology Information Centre



# Outline

- Strategies of opponents
- What are we doing wrong?
- What can we do?





- Suspicion
- Confusion
- Ignorance
- Vested interest
- Allegations

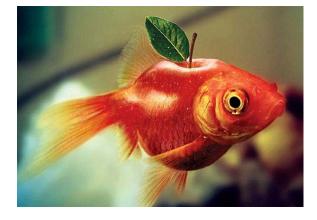


## **The Opponents**

• Creating doubts



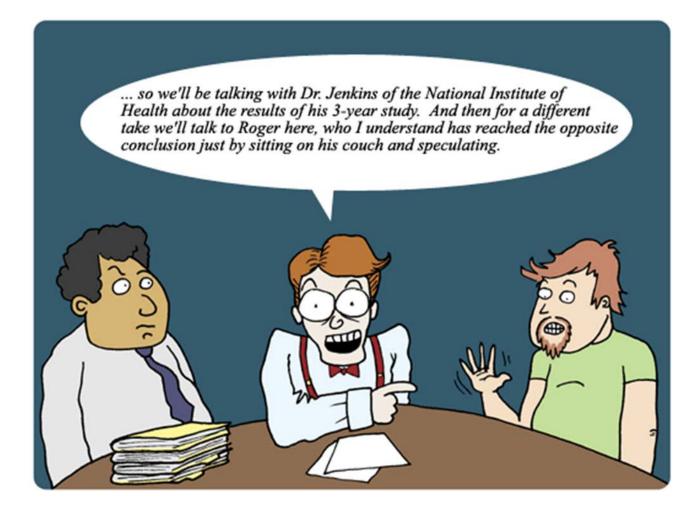




#### **Non-Science**

To bring about a greater articulation of the needs and rights of peoples in the South, a fair distribution of world resources, and forms of development which are ecologically sustainable and fulfill human needs — Third World Network	To promote peace and harmony, justice and sustainability. - Navdhanya
	An independent campaigning organisation, which uses non-violent, <b>creative confrontation</b> to expose global environmental problems, and to force the solutions which are essential to a green and peaceful future
	- Greenpeace

#### **Non-empirical evidence**



### **Opponents: The Strategy**

- Risk-driven story telling
  - Villain
  - Victim
  - Heroes

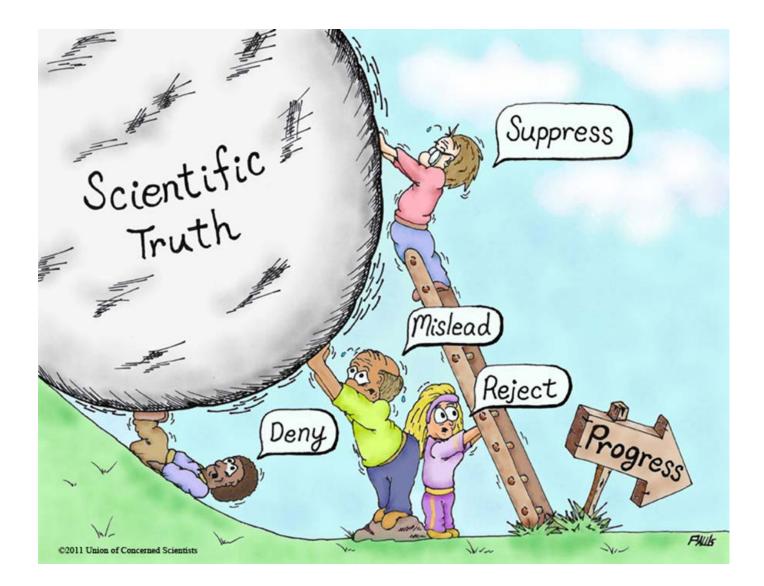
Shapes public opinion and influences policies

#### **The Opponents**

Has an agenda first and then seeks evidence to support his/her belief



#### **Opponent: The Machinery**



## **Opponent: The Machinery**

- More than 500 formal and informal "non-profit" organizations with combined annual expenditures of \$2.5 billion in annual revenues are involved in anti-ag advocacy in North America.
- More than 2000 NGOs in India

Funding sources are:

- 1. Foundations
- 2. Corporations
- 3. Wealthy individuals
- 4. Sales/ Subscriptions/
- Memberships/Litigation
- 5. Other individual donors
- 6. Government grants

#### **Industry support**





#### **Profit-motivated**

"If threats (*like GMOs, hormones and pesticides*) posed by cheaper, conventionally produced products are removed, then the potential to develop organic foods will be limited,"

Kay Hamilton, Promar, 1999 Organic Food Conference

In 2014 the "natural" products market in North America **exceeds \$290 billion annually** extending beyond organic foods to personal care and alternative health products and services according to the Natural Marketing Institute along with organic growing at record setting paces in the past 10 - 15 years. *Nearly three times the size of the global biotech and crop protection markets combined...* 

## **Our Hypotheses**

- Scientific information will increase technology acceptance
- The more educated a person is, the more he will understand GM technology
- Education can minimise/dispel risk aversion

• Why opposition to vaccination among educated parents?

# What we do wrong?

- One-way communication, educational and too academic
- Deficit model is widely practiced by scientists
  - We tell them what they need to know
  - We feed them with scientific information
- Tools used
  - Don't end up in the public domain
  - Elite websites (universities, science-based organisations
  - Publications that the public will not read or even have access to

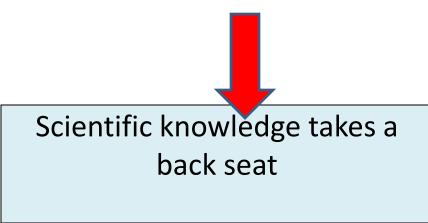


# **Cultural Cognition**

- How do people perceive risks and benefits?
- refers to the tendency of individuals to form risk perceptions that are congenial to their values

Dan M. Kahan (Yale University)

- Behaviour, social and cultural aspects, background
  - Strong understanding of sociology





# **Cultural Cognition**

- Simply educating the public is insufficient
- What happens when we try to educate the public or provide scientific evidence
  - Cognitive dissonance
  - When we provide data that is against the individual's predisposed values and views – the natural mental reaction is to resolve the issue
  - How by dismissing the conflicting information, and seeking reinforcing information from "trusted" sources

## **Cognitive Dissonance**

- Feeding 9 billion people
- Food security
- Climate change
- Reduced used of chemicals





- Farmer suicide
- Food monopoly
- Going against nature

### What do we do?

- Education is not obsolete
  - Minimise Cognitive Dissonance by engaging the values of the audience
  - Messages crafted in a way that affirms the values rather than challenging it
  - Showing them we share the same values
  - Likely to be more open to new information

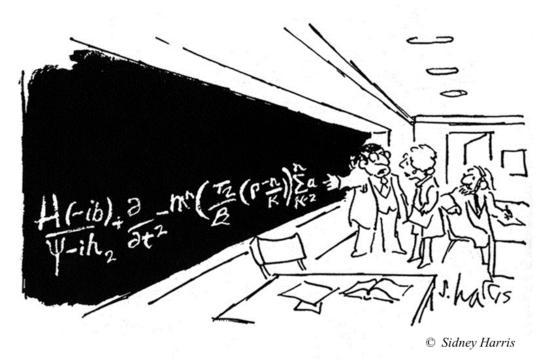
#### How?

- Peers as spokespersons or messengers
  - Using expert voices widens the views on risks
- Citizen journalism
- Reaching out to uninitiated minds start young, get to the audience before the NGOs get to them
- Unveil the mask worn by the opponents

# **The Problem / Solution**

Opposition	Scientists
Spreads fear and misinformation laced with value and emotion	Disseminate facts laced with science and jargons
Makes issues relevant to target audience	Issues alien to audience
So accessible to the public	In the ivory tower
Information available in social media	Information in journals, scientific websites
Fund from the industry / food retailers	Fund from the industry
Well organised machinery. Full time jobs	A lose network. Communication is an afterthought





"But this is the simplified version for the general public."

# The mind is not a vessel to be filled but a fire to be kindled."

-- Plutarch, Greek historian

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Thank you