

Technology and Global Development

Technology in Sustainable Development

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http://news.bbc.co.uk/1/hi/shared/spl/hi/picture_gallery/05/africa_0millenium_village0_in_kenya/img/4.jpg

World Poverty

Jeffrey Sachs' Model Villages

8 Kenyan villages, 5000 people
for example: Sauri

Fight for survival

Hunger, Aids, malaria

Provision in maize needed (staple
food)

Situation has deteriorated:
fertilizer is no longer used



Jeffrey Sachs' Model Village

Need for Investments

Agriculture

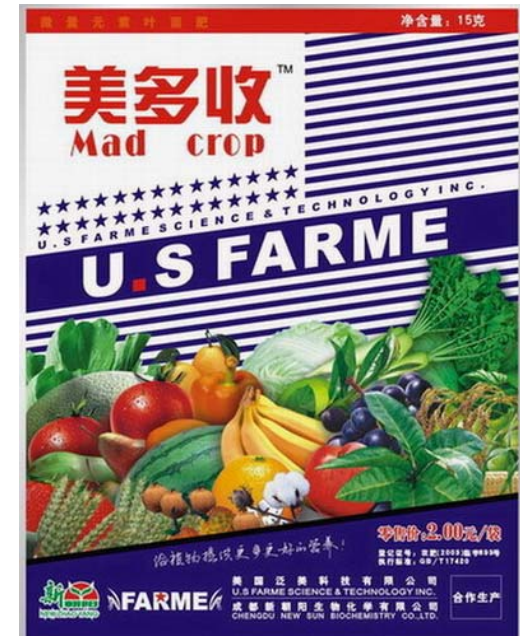
Fertilizer, improvement of soil,
irrigation, better seeds

Healthcare

Village clinics, mosquito nets,
medicine

Education

Meals, professional educations,
computer skills



www.made-in-china.com

Jeffrey Sachs' Model Village

Need for Investments

Energy, transport and communication

Grid connection or a diesel generator for electricity, truck for transportation

Safe drinking water and Sanitary Provisions

Protected sources, collecting rainwater



<http://www.bsos.umd.edu/econ/werling/truck.jpg>

Jeffrey Sachs' Model Village

Costs and benefits

Costs

\$ 350.000 dollar per year

\$ 70 per person

Benefits

will payback in lives, productivity and sales of products on the market



World Poverty

Earth Institute, Columbia University

5 clusters offered:

Earth Sciences

Ecology and conservation

Environmental Technology

Public Health

Economics and government policy

What's missing?



World Poverty

Also important:

Technology or sociotechnical systems

Organisation and management of technological development
(including the setting up of enterprises)

Technology and culture

Humanity Institute at Delft University of Technology?

World Poverty

Problems

Production

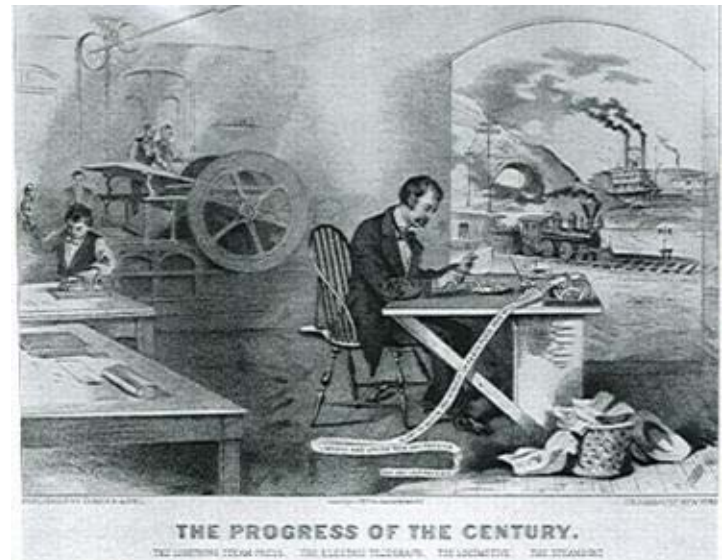
(solved in Europe by for example
the industrial revolution)

Distribution

(Europe: market-liberalism-trade
revolution)

Redistribution

(Europe: welfare states)



mhslibrary.org/.../progress.jpg

World Poverty

Problems

Infrastructure and health-technology
(Europe: social government policy
resulting in social revolutions)

Environmental Issues
(Europe: environmental discussions)



www.clubofrome.org



<http://www.ou.edu/student/ofc/WMM3.png>

World Poverty

A moral/ethical problem

When did it start and why?

Industrial Revolution – Sachs

Commercial, technological and industrial revolution in the Middle Ages - Landes

In 1820 all areas of the world were poor, by 1998 all had grown (however: the growth was average)

Led to the development of Western Welfare states)

World Poverty

A moral/ethical problem

History shows a variation in wealth and poverty

This is illustrated by varying centre's of technology, power, culture and wealth (e.g China till about 1500)

When were world poverty problems recognised?



http://www.everyculture.com/images/ctc_01_img0240.jpg

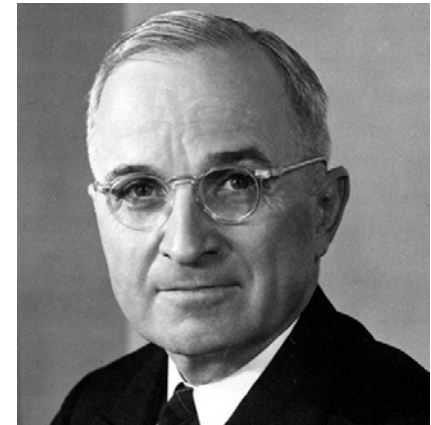
World Poverty

A moral/ethical problem

20th of January 1949: President Truman

“We must embark on a program for making the benefits of science and industry available for the improvement of underdeveloped areas
No imperialism, exploitation for profit anymore, but a program of development based on democratic fair dealing”

In the context of the Cold War: green revolution instead of a red revolution



www.visitingdc.com

World Poverty

Moral history of world poverty

Abolition of slavery

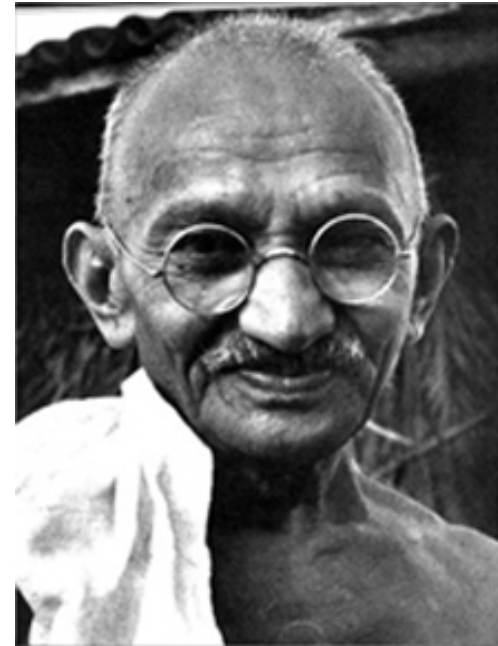
England- Quakers, Wilberforce, 1833

End of colonialism

2 worldwars,

Mahatma Ghandi (non-violence)

Indian Independence in 1947



www.uweb.ucsb.edu

World Poverty

Moral history of world poverty

Movement for civilian rights and anti
apartheids movement

Martin Luther King (I have a dream, 1963)

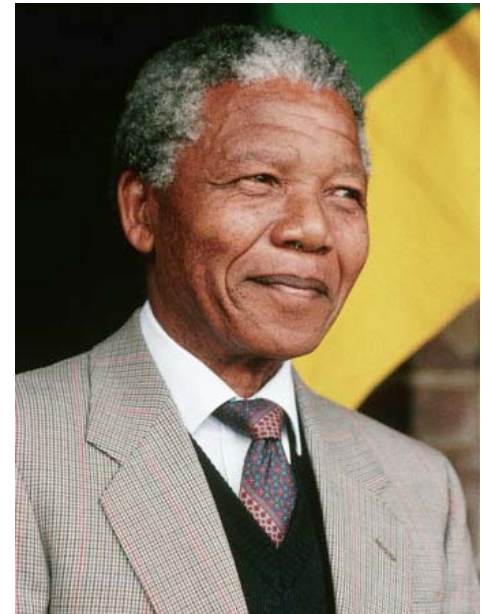
Nelson Mandela (1988)

Fight against world poverty

Milleniumconference UN

Milleniumgoals

Kofi Anan (We the peoples, 2000)



www.britannica.com/eb/art-73173/Nelson-Mandela

World Poverty

Conclusion

Fight against poverty is based on European (ancient Greek/ Jewish-Christian) idealism of equality

This idealism has been one of the accelerators of European revolutionary history



World Poverty

Ethics of Development

Does it matter

if world poverty was the “normal human pattern” that Europe defeated itself by means of an “ abnormal human pattern”?
or if the rise of Europe has supported, or even caused world poverty problems?

In the second case, the moral pressure is ethically stronger.

World Poverty

Ethics of Development

Similarly:

human or natural causes of
global warming?

is technological development
neutral and autonomous or
value- related and value-driven
(engineering ethics)?

