

Are banana, man made? History of Bananas

Banana is supposed to have originated in Malaysia around 2000 B.C. The original wild banana that existed during this time was **not** sweet and needed cooking before being consumed.

The banana as we know today was known to no one until the 1836 AD. It was during this year that a Jamaican, Jean Francois Poujot produced the mutant yellow sweet banana from the crossing of the green and red cooking bananas (modern day plantains). Once he tasted this sweet banana which could be eaten raw without cooking he quickly initiated cultivation of this new variety and owing to the new mutants sterility this was done by using offshoots from the base of the plants. Thus was born the sweet bananas of today.

the original wild banana

the banana we know today



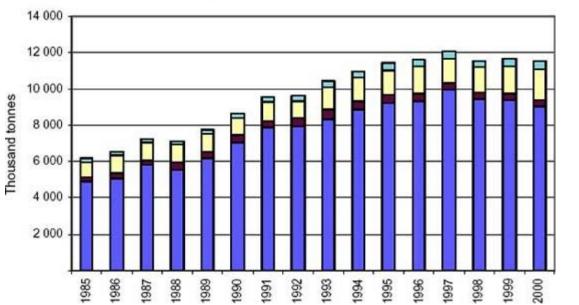


rawforbeauty.com



Latin America

Caribbean Far East Africa





Learn Something New Every Day at LSNED.com



Human Health Effects:

- 4 Known or Probable Carcinogens
- 7 Suspected Hormone Disruptors
- 2 Neurotoxins
- 5 Developmental or Reproductive Toxicants

Pesticide Residues Found in Bananas:

What Pesticide?

Thiabendazole	63.7%
Imazalil	26.0%
5-Hydroxythiabendazole	7.4%
Azoxystrobin	4.2%
o-Phenylphenol	2.0%
Pyrimethanil	1.5%
Oxamyl oxime	1.1%
Chlorpyrifos	0.4%
Myclobutanil	0.3%
Bitertanol	0.2%
Carbendazim (MBC)	0.2%
Carbaryl	0.1%

symptoms of chronic poisoning

CENTRAL NERVOUS & AUTONOMIC SYSTEMS

In-coordination; fits; unsteadiness; numbress; fingling; acute depression; symptoms that mimic recognized neurological diseases, neurobehavioral deficits in children; Parkinson's disease

HAEMATOLOGICAL & IMMUNE SYSTEM

Anaemias; clotting problems; white cell depression; leukaemia; non-Hodgkins lymphoma.

HEART & CARDIOVASCULAR SYSTEM

Chest pains; circulatory failure; heart musculature

ENDOCRINE SYSTEM

Suppression of adrenal cortex; hyporthyroidism; hyperglycaemia; suppression of endocrine function; breast cancer; testicular cancer; adrenal cortex

REPRODUCTIVE SYSTEM

Steniity, foetus maiformation; stillbirth ; spontaneous abortion

EYES, EARS, NOSE & THROAT

Conjunctivitis; minitis; sore throat; eye damage

RESPIRATORY SYSTEM

Asthma; burning and irritation; lung damage; Skin persistent dermatitis (especially of hands); eczoma

GASTRO-INTESTINAL SYSTEM

Odd taste in mouth; weight loss; internal bleeding

LIVER

Disruption of enzyme systems, low tolerance to chemicals and alcohol; chemical hepatitis; jaundice

> URINARY SYSTEM Kidney damage

MUSCULO SKELETAL STSTEM

Muscular fendemess; low muscle strength; muscle cramps







How the banana relates to contemporary Issues

- "Artificially" produced food Chemically contaminated
- "staple" food
- "marketed" by the media
- "Monoculture" agriculture
- "Endangered species"biodiversity

- Corrupted governments
- Control by Multinational corporations
- Transportation-energy
- Teaches safe sex

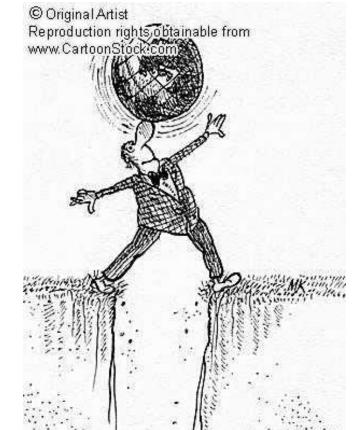




TOPICS

- Media
- Population overshoot
- Ecological footprint / sustainability
- Peak oil/ energy
- Water resources
- Food
- Environment/ biodiversity
- Social Justice
- Biodiversity
- Conflict /terrorism
- The "good life"
- Systems thinking





Contemporary Issues (or the "Doomsday class") Holyoke High School

Assessment

- Daily class participation
 attitude
- results goals of measurable degree ubrics mission analysis outcomessystematic undertaken Assessment urvey degree analysis outcomessystematic undertaken becific urvey degree analysis outcomessystematic urdertaken becific urvey degree analysis outcomessystematic urdertaken becific urvey degree analysis outcomessystematic urvey degree analysis outcomessystematic urdertaken becific urvey degree objectives outcomessystematic objectives outcomessystematic outcomessystematic objectives outcomessystematic objectives outcomessystematic objectives outcomessystematic objectives outcomessystematic objectives outcomessistematic objectives outcomessistematic outcomessistematic outcomessistematic objectives outcomessistematic outcomessistematic outcomessistematic objectives outcomessistematic outcomessiste

LEARN

ALIGN

ANTIC

CHALLENGE

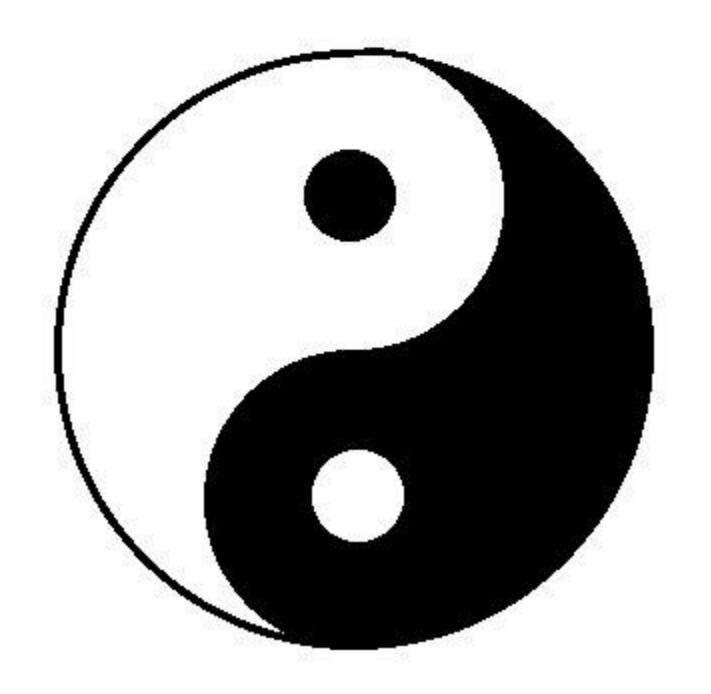
INTERPRE

- Maintaining a notebook portfolio*
 - Complete, organized, creative
- Maintaining an agenda
 - Daily objectives
- Weekly current events homework*
 - iceberg model format
- Weekly objectives quiz
 - Three daily objectives from week
- Midterm and final exam

Each Unit consists of....

- Lecture notes
- Guided reading
- Activity
- Video

– Sometimes more than one of each....



What are contemporary issues? A current events class and

more...

- Global Issues
- System thinking
- Sustainability/Sustainable solutions
- Worldview with mind toward social justice

Psychology Physiology Anthropology Sociology Biology Meteorology Geology Demography History **Political science** Communication



People and the Planet

...and what you bring to it.

- What are important issues to you?
- What's going on in our community?
- How are people confronting and solving problems here?



Global Issues



- Effect wide area of planet; across political and social boundaries- transnational or transboundry
- Large number of people and environments
- Long lasting, persistent
- Interconnected



Global Issues

Thematic area

• Global economy

• Global Human Development

• Peace and security

Issues

- International trade, financial stability, poverty and inequity, foreign aid, debt relief, international migration, food security, intellectual property rights
- Universal education, communicable disease, humanitarian emergencies, hunger and malnutrition, refugees
- Arms proliferation, armed conflict, terrorism, removal of land mines, drug trafficking, crime, disarmament, genocide

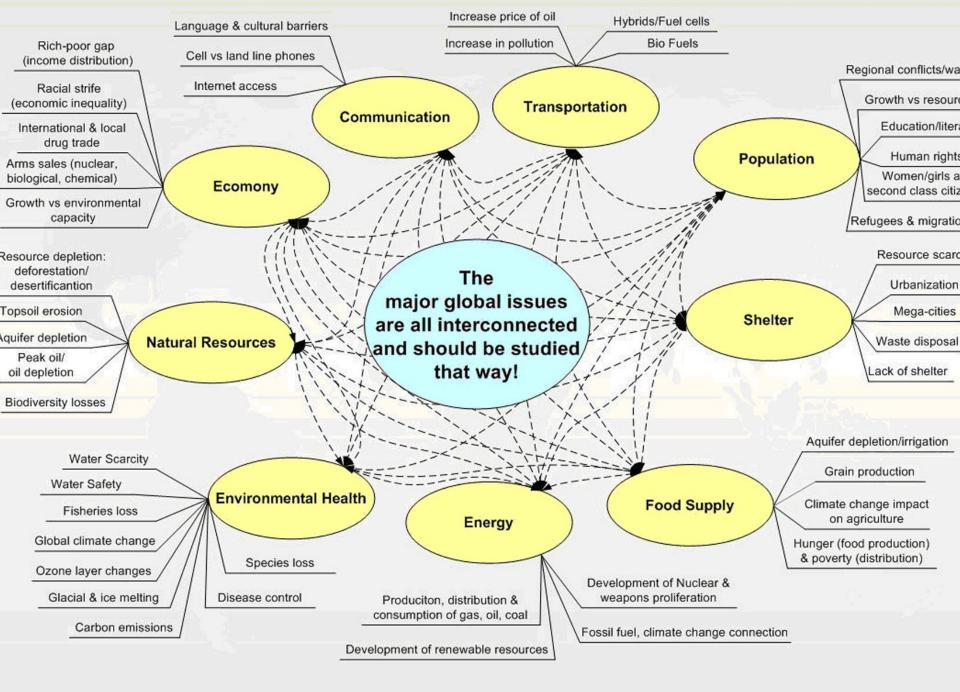
Thematic area

Issues

- Global environment and natural resources
- Climate change, deforestation, safe water, biodiversity, land degradation, sustainable energy, loss of fisheries

• Global Governance

• International law, multinational treaties, conflict prevention, human rights, U.N., global compacts

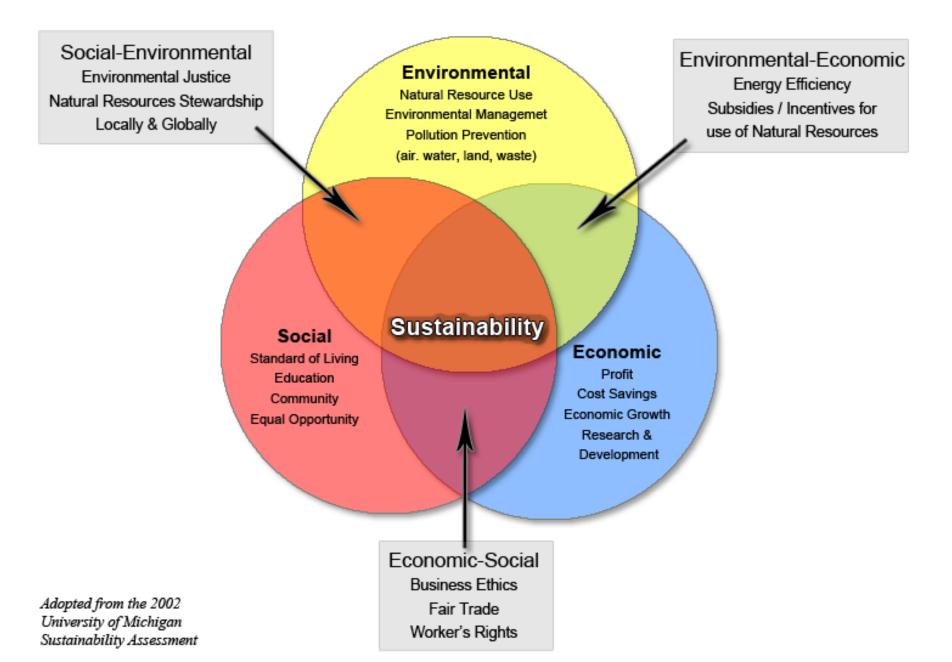




SUSTAINABILITY

is to meet the needs of the present without compromising the ability of future generations to meet their own needs.

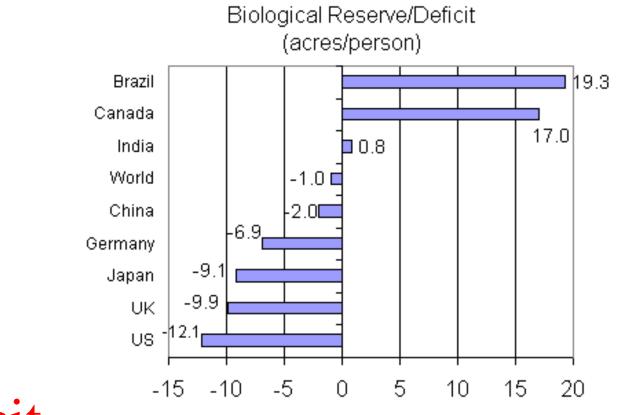
The Three Spheres of Sustainability



Definition and components of an ecological footprint

- The area of the Earth's <u>productive surface</u> that it takes to produce the goods and services necessary to support a person's <u>lifestyle</u>.
 - Oxygen—green plants
 - Food- farm and pasture
 - Water-domestic, industrial, agricultural
 - Fiber-clothes, wood, upholstery
 - Energy- transportation, domestic, industry
 - Infrastructure- roads, hospitals, water facilities
 - Waste disposal- burn, bury, dump at sea
 - Recreation- FUN!





Biodeficit

WWF International. Living Planet Report 2006 http://www.panda.org/news_facts/publications/living_planet_report/index.cfm

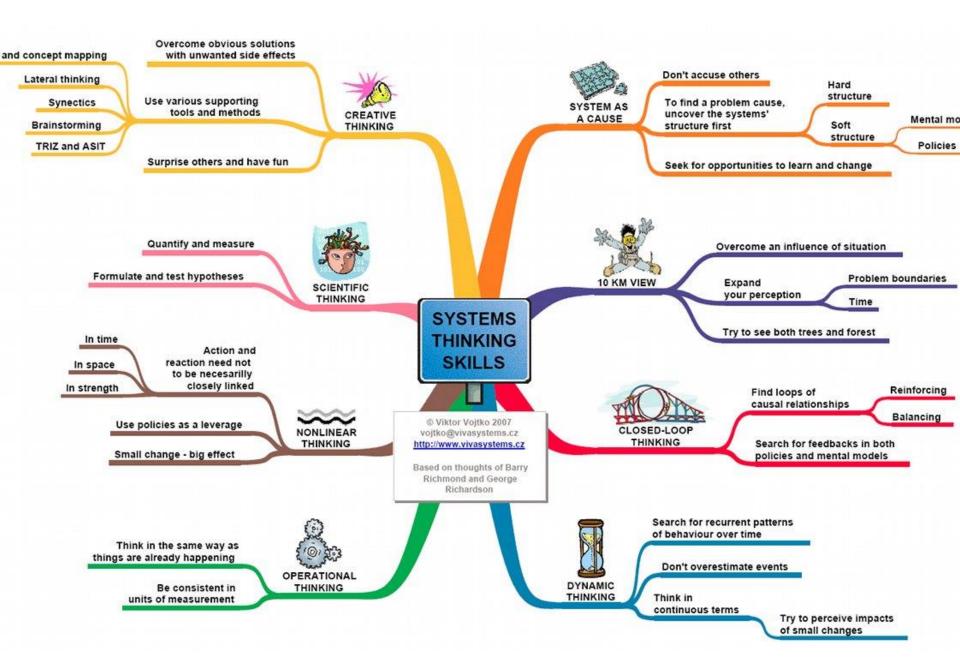
How much beyond the bioproductive capacity of the planet an organism or group of organisms uses to maintain its lifestyle

terms

- Measure of sustainability- ecological footprint
- Predictor of sustainability- P x A x T = Impact (footprint) (population, Affluence, Technology) called IPAT
- Renewable resources- resource that replace themselves—ie; wood
- Nonrenewable resources- resource that are finite, will run out- ie; oil
- Environmental Scarcity limited amount of resource in a geographic area
- Structural Scarcity- unequal distribution of goods and services

Systems thinking

- Linear- cause and effect
- Systems- causes and effects (seeing the "whole")
- Seeing the complex web of interconnectedness between issues
 - healthy competition, sharing of ideas
 - Critical thinking: evidence, credibility, multiple perspectives, scope, solution-oriented, sustainable
 - Intended and unintended consequences
- Leverage points- where we can intervene in systems to make most changes
- Examples of systems: economic, cultural, political, environmental, energy, human rights, health, food, conflict/peace





Systems Thinking Your Ability To See Things As a Whole

Systems thinking is your ability to see things as a whole (or holistically) including the many different types of relationships between the many elements in a complex system.

Complex System Rules of Thumb

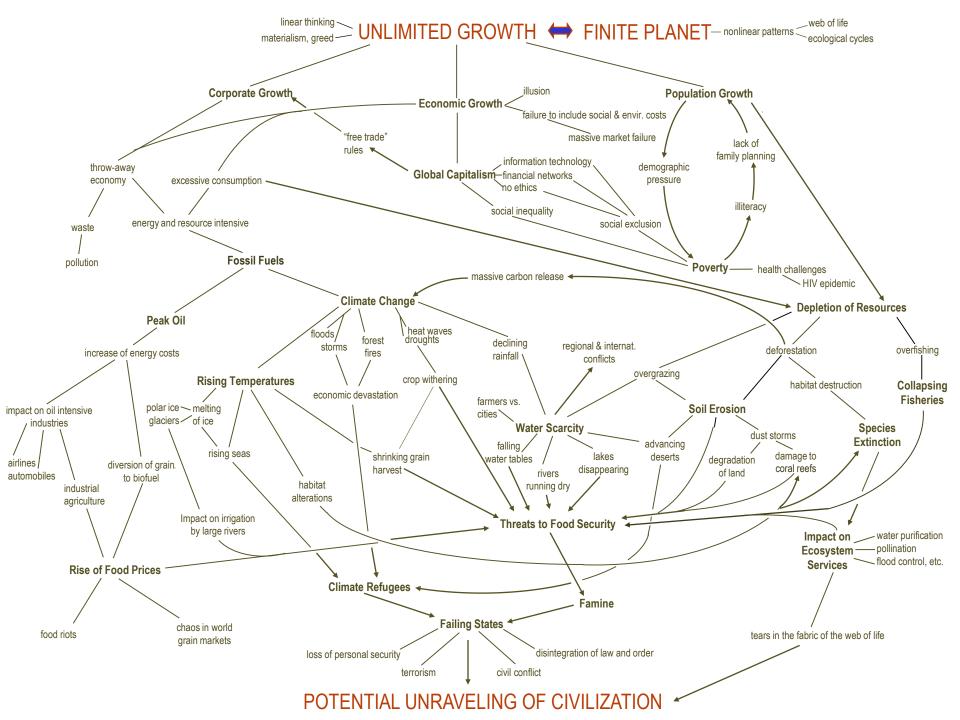
By Gene Bellinger

- Everything is connected to everything else
- 🗸 You can never do just one thing
- There are no simple solutions and final answers
- Every solution creates new problems
- 🗸 "Obvious solutions" do more harm than good
- 🗸 Loose systems are often better
- Look for high leverage points
- 🗸 Nature knows best



Systems Thinking	dealing with the whole system and thinking about how things interact with one another
Systematic Thinking	thinking methodically
Systemic Thinking	combining analytical and synthetical thinking

1000 ventures.com





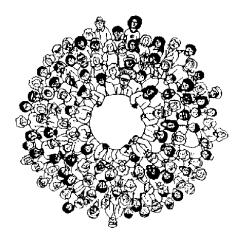
...each day brings further evidence that the ways we use energy strengthen our adversaries and threatens our planet.

> To the people of poor nations, we pledge to work alongside you to make your farms flourish and let clean waters flow; to nourish starved bodies and feed hungry minds. And to those nations like ours that enjoy relative plenty, we say we can no longer afford indifference to the suffering outside our borders; nor can we consume the world's resources without regard to effect. For the world has changed, and we must change with it.

> > Barack Obama January 20, 2009

Social Justice

- Fairness
- "...all men are created equal"
- Universal Declaration of Human Rights
- Quality of life



Armada 5 All Incident Indexes are Lonis free and optial in dignity and status. They are endowed himsely on and ensurement and should setspirit of levelo-

Article AS (1) Eastern

10) No say shall be

feasily is do canonal and functor

and he within a behind as all the stahts and feerdone on hack in the Declass-on, without distinction of any kind, such as new colour, any language, religion, policiaal inters, national or sortal origin, proother states. Furthermore, stem shall be made on the basis of th innal or increasional or or tetritory to which a p design, whether it has independent arrive and the 2 Everyone has the right to life

article 4 No cas shall be held to damay as Allow 4 No one and the fairs take main as fine to matery and its face, problem is all face forms. And shall be drived by the form of the face in order to and problem is all face forms. Article 3 No one shall be salighted in topone or to crud, informat or depaiding theory article 6 Europee hat His rules a

ten ererysten as a person t initided without say discensioning re-presentes of the law, kill are entitled to extension against any checksdow int of this Declaration and again motel to such discriptions that Article & Everyone has the right on all rale for sets violating the fundation

practed lide, by the constitution or by line Article V No one shall be subposed to a many agrees, descention or walls. Article 10 Surgeme is costoled in hill opeality to a fair and public bearing by an independent

of importial tribunal, in the determination of his rights and shignstons and of any cristited charge against lan. Arricle 13 [1] Doryons charged with a penal allower has the sight to be presented incovert

until parentl guilty according to late to a pe-life that at which he has had all the genueen necessary for his defence. 2) No the shall be held gally of any p

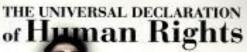
theses an account of any art or analogous who th did not construct a penal offerers, and tational to be reasonable at an at the stars who was compliand Nor shall a heavier per improved than the cost that was appl if the time the panel offence was utilele 12 No one shall be subjected interv introdivence with his invite, may be alked.

his housest and reparation Exright to the protocilors of the law risteries. Article 13 (1) Entryped has the sale to fa

its of manufacture and real-factors within onloge of each many Everyone has the right to loave any ery, including his own, and to parara to his

article 54 (1) Everyone has the right to weat of an origin in other countries arobut from such and his hardly as nationers w

barrose dignicy, and supplemented, if mone-It This sight may not be invalid to the case same, by other means of uncial protection.



(4) Everyone has the staffs to from and to join in the part. multi mices for the protection of his imof the local division in which the local division in the local div

Article 24 Everyone has de sigla to and hierory, including manuable inclusion of working bours and periodic holidays with

unlicits 25-(1) Everyone has the right in a number of living a dispose for the boath and will being of himself and of his family, including locd, the hing, browing and medical same and surrowary social arrives, and the tight is unity in the event of anomployment, disability, widewhend, and age or other of itselfhood in circumstances beyond his

Mainshood and diskland or spread outy and animum, All children,

Areads 26(1) Everyone has the right to adcon Education thad by live, at loar in the and handsensested stagest Element property share as well as in association with

adonal education shall be made pe-allelile and higher education ally as milde in

ten shall be discussed to of the homan presentity and the string Perceptions. In plant ing, mirraror and frime shall forther the activities of the Line as for the maintenance of peace.

Particula haven a preser state to obse of of education that shall be given to

Article 27 (1) Everyone has the sight feedy to percepte in the colored life of the companyop, to respire the actes and no aliant its actional fit of value operation and its formeders. (Spice)

[2] Everyone has the right to the pa of the moved and macould internets result from any minutific, literary or articule pands her batalo sil-

tion of which he is the pulles. Andele 25 Everytee is ratiofed to a social and di tini in structural order is which der rights and produins an forth in this Declaration can be fully enabled activity (1) Everyone has desire to

neriador in which aloos the free and full whispersons of his personality is possible (2) In the cameter of his rights and its orners shall be subject o tions an are represented for later any for the status and found while order and the s

(I) Thisse rights and other index of the

the of

f at the des from the Logic by

Global Issues- vocabulary

- Developed / Industrial /Rich / Western / Modern / First World- U.S., Canada, Western Europe, Australia
- Developing / Third World / Poor- rest of the world
- Poverty- poor; 60% of world's population lives on less than \$2 dollars a day
- Migration / Immigration / Emigration: migrant/ refugee-People moving influenced by "push and pull factors"

Globalization- Free movement of goods, people and ideas

- **Worldview**-your personal and cultural beliefs about other people and cultures of the world.
- **Personal solutions-** things individuals can do
- **Structural solutions-** things government, NGOs or corporations can do; usually address underlying problems
- **Subsidies-** tax money given to certain businesses to encourage something believed beneficial

- Gross Domestic Product (GPD) Value of all goods and services in a country
- Genuine Progress Indicator (GPI) Value of all goods+
- nonmaterial resources (volunteer work, housework, childcare,
- etc.) negative (crime, pollution, etc.)
- Purchasing Power Parity (PPP)- What you can buy in different places based on a certain amount of money