

Monitoring Sustainable Development in Switzerland: A Game-oriented Approach to the Communication of Sustainability Indicators

Project Leaders:

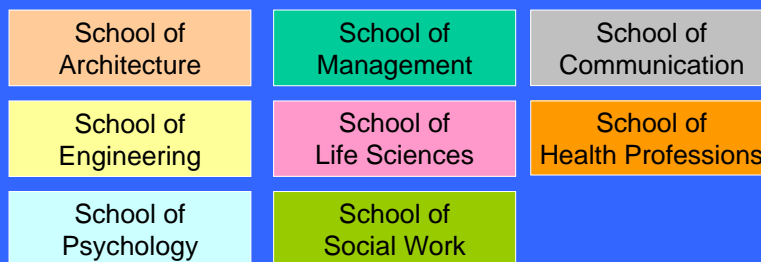
Vicente Carabias, ZHAW Institute of Sustainable Development / JRC-IPTS
Dr. Markus Ulrich, UCS Ulrich Creative Simulations

Project Partners:

Swiss Federal Statistical Office, Lehrmittelverlag h.e.p., suter & sager AG,
more experts and various supporters

➔ Test-Workshops with many Students and Adults

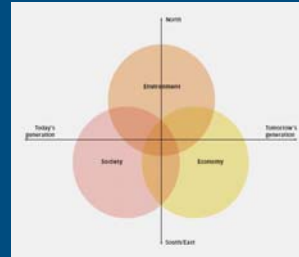
ZHAW Zurich University of Applied Sciences



- ZHAW is one of the largest multidisciplinary universities of applied sciences in Switzerland
- 6000 students, 900 lecturers, 600 research associates and employees, 25 bachelor degree programmes, 30 master of advanced studies (MAS)
- ZHAW offers training, applied research & development, as well as consulting services
- The Institute of Sustainable Development is active within the School of Engineering

Institute of Sustainable Development at ZHAW

- Provides research, services and education focused on the three dimensions of sustainable development
- Three main research areas:
 - corporate sustainability
 - sustainable municipal development
 - sustainable location development
- Performs transdisciplinary projects
- Development of concepts, models, strategies and evaluation processes supporting sustainable development



[ARE, 2004]

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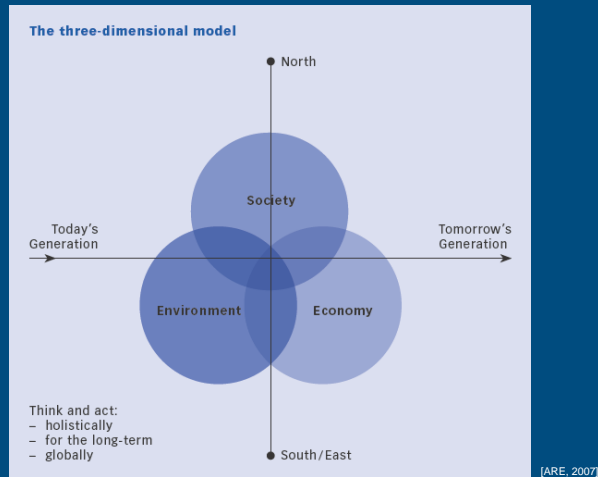
Rationale 1

The relevance of Sustainable Development (SD) is increasing:

- Brundtland-Report 1987, Rio Declaration 1992, Johannesburg Summit 2002, UN Decade "Education for Sustainable Development" 2005-2014
- Article on promoting SD in the revised Federal constitution since 1999, Federal Council's Strategy on SD 2002: Raising public awareness via education, Monitoring of SD by periodic production of sustainability indicators

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Sustainable Development in Switzerland



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Rationale 2

Monitoring of SD in Switzerland (MONET)

- MONET is a system of indicators designed to measure progress towards SD in Switzerland, intended for both the general public and policymakers, providing over 120 regularly updated indicators.
- The MONET system is based on a series of postulates which transform the qualitative objectives of SD into specific requirements.
- More information about MONET: www.monet.admin.ch

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Monitoring of SD in Switzerland (MONET)



[BFS 2005]

Features:

- 3 Dimensions for SD
- 20 Postulate Areas
- 26 Topics
- > 120 Indicators
- Trend
- Assessment

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Key Questions of MONET

The focus is on the following questions:

- Is Switzerland on the path towards SD? What are Switzerland's strengths and weaknesses as it travels this path? What are the key factors, and what major obstacles are there?
- Why is Switzerland (not) on the path towards SD? What are the positive and negative developments, the shortcomings and potentials at the levels of government, the economy and society?
- What needs to be done to move Switzerland onto the path towards SD? Which measures take priority?
- How useful are systems of indicators to evaluate sustainability in a country?

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Handicap and Solution

Monitoring of SD in Switzerland (MONET) (www.monet.admin.ch)

- A lot of MONET-information should be of general interest. So far this information is only known to a small group of experts.
- Dissemination through brochures, e.g. the key indicators representing a group of MONET indicators, highlighting major trends and the salient features of a given phenomenon.
- With the development of an attractive card game and its internet-connection the MONET-knowledge shall be accessible to wider population groups.

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MONET key indicators 1 & 2 [BFS 2008]



Are we headed in the right direction?

An overview of the 17 key indicators:

1 Meeting needs - How well do we live?	Assessment	Page
People's health is improving.	+	5
People are not earning more.	R	6
Violence is on the rise.	-	7
The unemployment rate is stagnating.	R	8
2 Fairness - How well are resources distributed?	Assessment	Page
Poverty is not declining.	R	9
Official Development Assistance spending is stagnating.	R	10
The wage gap between men and women is gradually narrowing.	+	11

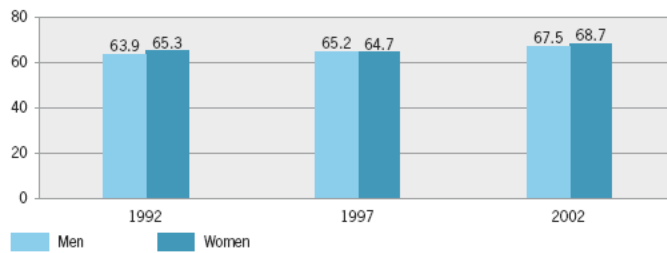
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MONET key indicators 1 [BFS 2008]



How well do we live?

Life expectancy in good health Life expectancy at birth in years



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Source: Federal Statistical Office

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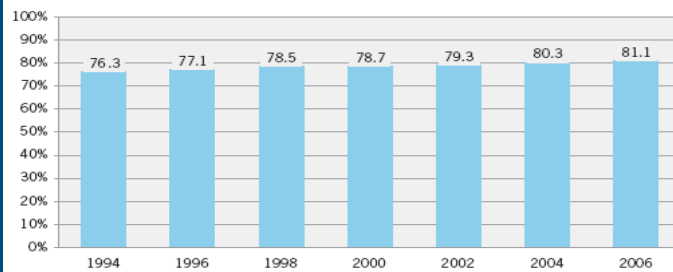
MONET key indicators 2 [BFS 2008]



How well are resources distributed?

Wage gap between men and women

Women's monthly gross wage as a percentage of men's monthly gross wage

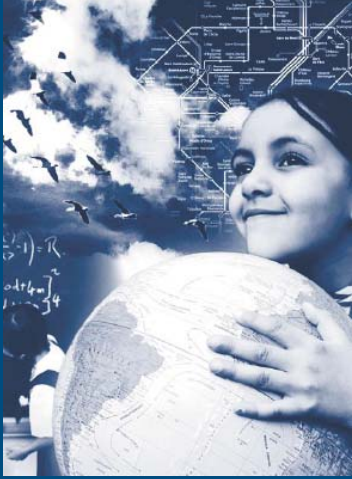


© FSO

Source: Federal Statistical Office

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MONET key indicators 3 & 4 [BFS 2008]

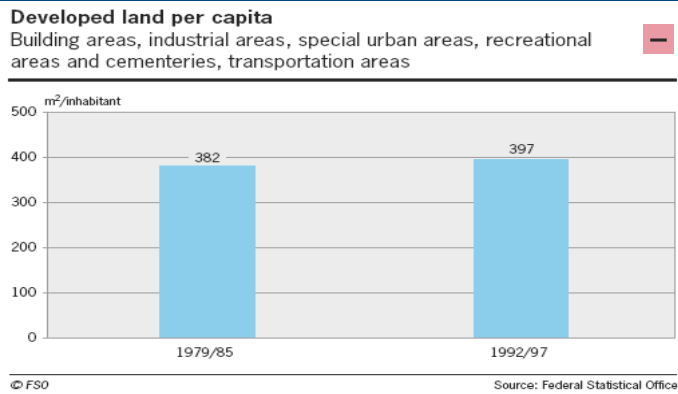


3 Preservation of resources – What are we leaving behind for our children?	Assessment	Page
Teenage reading skills are hardly improving.	R	12
Debt has risen.	-	13
The investment to GDP ratio is about the same.	R	14
More people are working in science and technology.	+	15
The populations of breeding birds fluctuate.	R	16
Developed land is encroaching upon the landscape.	-	17
4 Decoupling – How efficiently are we using our natural resources?	Assessment	Page
Freight transport is growing faster than the economy.	-	18
The public to total transport ratio is increasing.	+	19
Per capita consumption of fossil fuels has remained about the same.	R	20
Material intensity fluctuates.	R	21

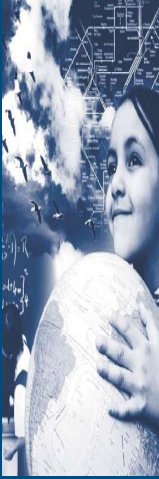
MONET key indicators 3 [BFS 2008]



What are we leaving behind for our children?



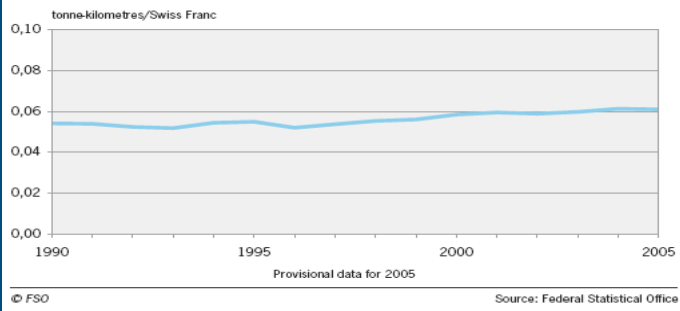
MONET key indicators 4 [BFS 2008]



How efficiently are we using our natural resources?

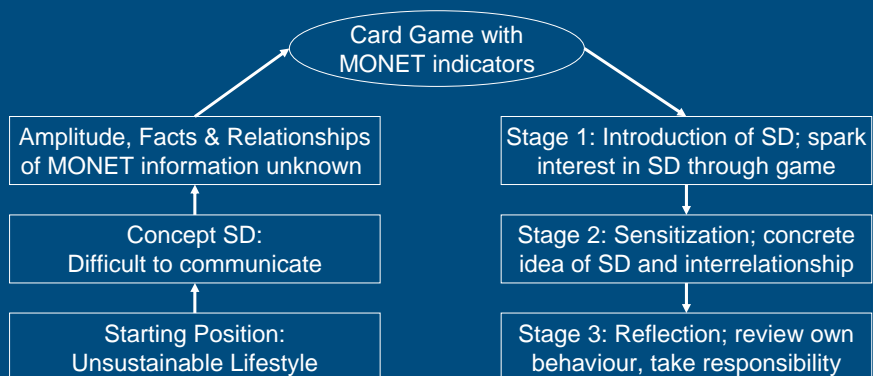
Intensity of freight transport

Performance of freight transport in relation to Gross Domestic Product at constant prices



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MONET card game – Concept



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MONET card game – Goals & Target Group

Goals:

- Game-oriented Approach to the theme Sustainable Development (SD)
- Make MONET-Knowledge accessible to wider population groups
- Raising public awareness about MONET information
- Sensitization for SD in Switzerland
- Advance the knowledge about the development of relevant SD factors

Target Group:

- Education for SD (Universities, High Schools, Social Clubs , Families)
- Further Training & Raising Awareness (Companies, NGO)

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Game Development

Phases of the Game Development:

- Various Supporters and Project Team
- Game ideas
- Databank
- Indicators and Postulates concretized
- Game Rules
- Art Design
- Teachers Guide
- <http://www.klartext-monet.bfs.admin.ch> (updated data, further information and game ideas, teaching material)

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CLEARTEXT With Facts and Fantasy into Future

The card game with exciting information about Switzerland based on the MONET sustainability indicators

Launch in German language was in December 2008:
Order forms of the publishing house for teaching materials h.e.p. (www.hep-verlag.ch) are available after session

MONET card game – Databank

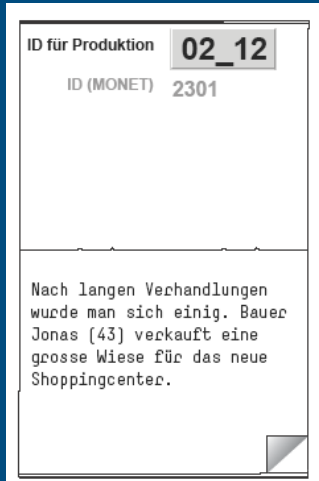
Erstellen der Texte für die Vorderseite der Indikatorkarten:

Das neue Harry Potter-Buch wurde von Lauren (14) in Rekordzeit verschlungen.

Lesefähigkeit der 15-Jährigen

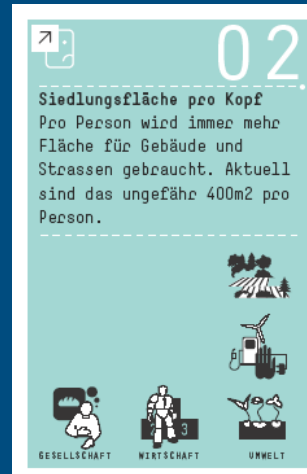
Jede/jeder Sechste besitzt keine ausreichenden Lesekompetenz, bei gleichbleibendem Trend.

MONET card game – information on the card



← On Card-Front side: With a Scene of everyday life the Indicator shall be concretized.

→ On Card-Back side the State of the Indicator's Development shall be described, assessed and put in relation to Postulates and Sustainability Dimensions.



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MONET card game – graphics and game idea

- Indicators are thematically classified and connected to target areas (media dept.).
- The Players collect the entrant news cards, which they use for their editor's job.
- The more articles you "write" (collecting adequate news), the more points you win.




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MONET card game – reporter cards

Nr. 02

GESELLSCHAFT

Materielles
Jedem ein Dach über dem Kopf und was es braucht zum Leben, heute und morgen!
Gesundheit schützen und fördern!
Niemand lebt in Armut!




11.8.08 Prototypen V15

Nr. 07

GESELLSCHAFT

Humankapital
Kulturelles Erbe erhalten!
Förderliches Umfeld für Kinder und Jugendliche!
Lernfähigkeit fördern!
Informations- & Meinungsfreiheit für alle!




11.8.08 Prototypen V15

Nr. 12

WIRTSCHAFT

Produktion & Konsum
Güter und Dienstleistungen umweltgerecht produzieren!
Umweltfreundlicher und sozial gerechter Konsum!
Glasklare Information der Konsumenten!



11.8.08 Prototypen V15

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MONET card game – game phases

Infokarte

Spielphasen

- 1 **Bieten.** Reporter für Newskarten
- 2 **Aufdecken.** Newskarten gemäss Symbolen zuteilen. Jeder verliert die Hälfte seiner nicht passenden Reporter.
- 3 **Karten handeln**
- 4 **Newskarten klauen.** 1 Reporter entlassen; eine Farbe nur 1x klauen.
- 5 **Artikel schreiben.** Min. ein Paar gleicher Farbe, Ereigniskarte befolgen, 1 Reporter anstellen, Punkte aufschreiben:
 - 1 pro Symbol
 - 2 Bonus je Karte (ab 5 Karten)
 - 7 Bonus für 3 Bereiche
 - Bonus/Malus der Ereigniskarte

THEMA: NUMMER & BESCHREIBUNG	ANZAHL KARTEN PRO THEMA
01 SICHERN: SICHERHEIT, WOHLSTAND, ZUSAMMENHALT, ENTWICKLUNGSHILFE	14
02 WOHLSEIN: GESUNDHEIT, LEBENSBEDINGUNGEN, WOHNEN, RAUMNUTZUNG	13
03 BEWEGEN, AUCH GEISTIG: KONSUM, KULTUR, FREIZEIT, MOBILITÄT	14
04 WISSEN UND ARBEITEN: BILDUNG, WISSENSCHAFT, INFORMATION, ARBEIT, FORSCHUNG, TECHNOLOGIE	16
05 WIRTSCHAFTEN UND PRODUZIEREN: MAERKTE, WETTBEWERB, PRODUKTION	14
06 ALLES WAS FLIESST: LUFT, WASSER, KLIMA, ENERGIE	15
07 BODEN UND WAS DARAUF LEBT UND FLIEGT: STOFFE, ABFAELLE, ARTENVIELFALT, WALD	13

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MONET card game – game starting point

Ausgangssituation

Fransözisösch war nicht das Lieblingsfach von Kevin [19]. Doch jetzt findet er es cool, sich mit seiner neuen Freundin aus Genf unterhalten zu können.

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Nach langen Verhandlungen wurde man sich einig. Bauer Jonas [43] verkauft eine grosse Wiese für das neue Shoppingcenter.

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MONET card game – game starting point

Ausgangssituation

03

Zweite Landessprache
Ein Fünftel der Bevölkerung verwendet im Alltag regelmässig eine zweite Landessprache.

Sozialwissenschaften
Wirtschaft
Geologie

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02

Siedlungsfläche pro Kopf
Pro Person wird immer mehr Fläche für Gebäude und Strassen gebraucht. Aktuell sind das ungefähr 400m² pro Person.

Sozialwissenschaften
Wirtschaft
Geologie

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Internet-Connection of MONET card game on www.klartext-monet.bfs.admin.ch

Content

- Teachers Guide
- Updated MONET-Databank commented
- Background-Information for each Indicator Card
- Links (to relevant projects, institutions, companies)
- Good Practice - Databank



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Conclusions

- Objective and high quality communication to the general public on statistics is essential. Only then can official statistics truly fulfil their function as a public good and a powerful tool in a modern democracy.
- Through the use of references to everyday life, players are skilfully guided towards the facts surrounding the subject of sustainable development in Switzerland.
- Uniquely, KLARTEXT combines fun with the dissemination of knowledge about sustainable development in Switzerland.

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Thanks for the necessary support...

AVINA STIFTUNG

Coop
Federal Statistical Office (FSO)
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Environmental Protection of Canton Zurich
Federal Office for Agriculture (FOAG)
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Orange Communications SA
Heuberger Foundation
Board of Environmental Agencies of Central Switzerland
ETH Zurich
Anniversary Foundation of Zurich Financial Services Group
Canon (Switzerland) AG



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Thank you for your attention!

Vicente Carabias
Institute of Sustainable Development at ZHAW
cahu@zhaw.ch

KLARTEXT is combining
→ sustainable development
→ learning tool
→ card game

(order form available
on request after session)



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