

# **Country typology based on their climate change, bioenergy and food security patterns**

**Presented by Paolo Santacroce**

# From the TORs of the study

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1. Evaluate the list of national indicators provided by FAO and insert new ones, replace or combine them if needed
2. Perform a quality check of the matrix of indicators with particular reference to the averages, time series and trends, and estimate any missing values
3. Generate a typology of countries/regions according to the combination of existing food security situations with projections of climate change impact

## **replace or combine national indicators if needed**

Few original variables (indicators) have been replaced, many indicators have been computed (indexes, ratios, %, growth rates, and so on..)

## **data quality check**

An intensive time-consuming data quality check has been carried out to identify inconsistencies both in the sources and in the database collated by FAO HQs.

## **estimate any missing values**

The original database collated by FAO HQs contained 881 variables, but only 20 variables (2.27%) were available for all the 195 countries.

The consultants have collated and/or estimated “missing values” of other 147 variables (or have computed suitable indicators) for all the 195 countries

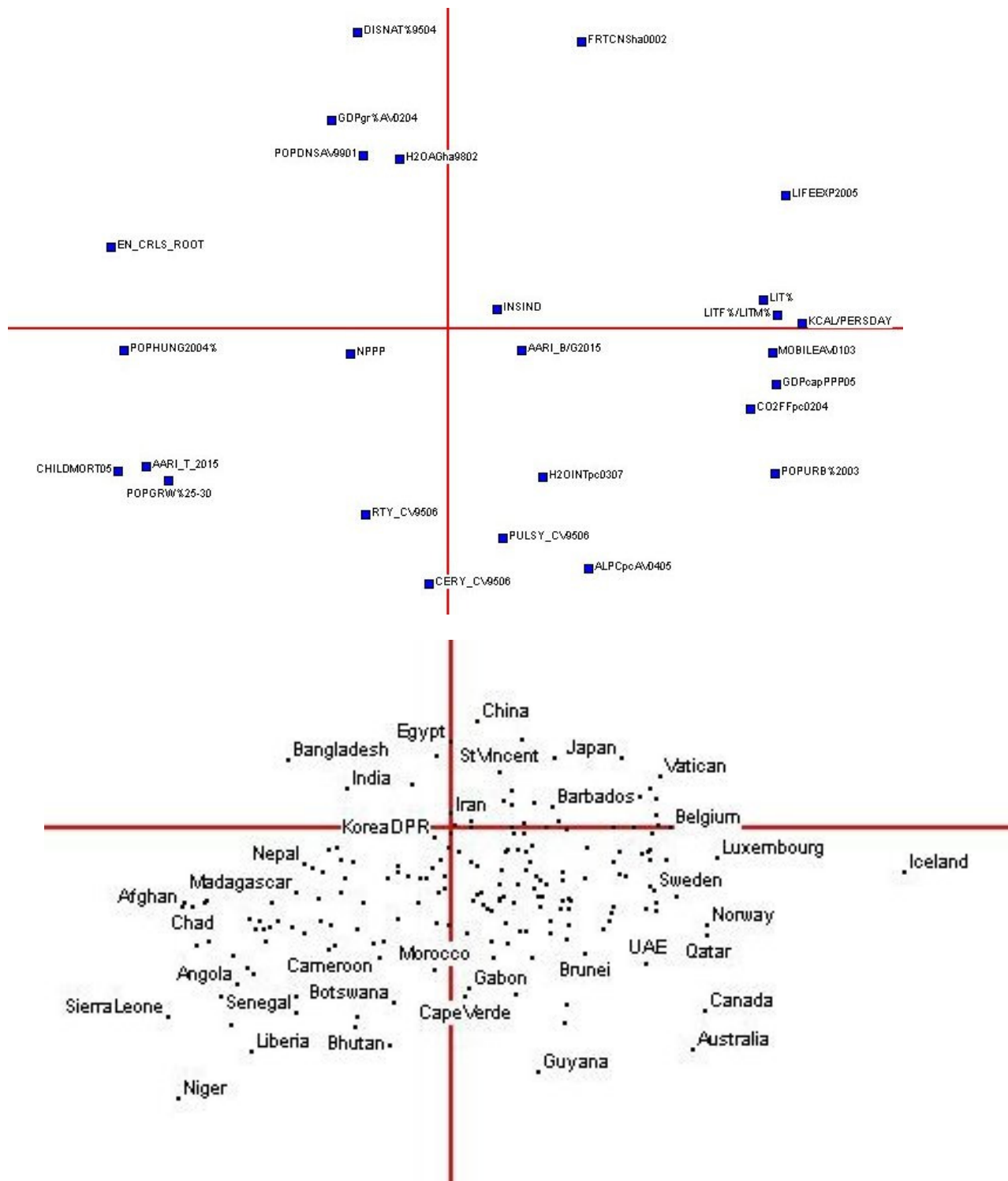
## **generate a typology of countries/regions**

“a first preliminary tentative rushed improvised provisional experimental draft “ (Gommes) is provided in this ppt presentation

## List of "decent indicators" used only for the illustration during EM\_1

GDPcapPPP05	EC-GDP pc PPP US\$ 05
GDPgr%AV0204	EC-GDP Ann % Grwth Rate AV02-04
POPHUNG2004%	H-%Pop undernourished 02-04
CHILDMORT05	D-Under-five mort rate 2005 (per 1000 live births)
KCAL/PERSDAY	V-KCal per person per day
EN_CRLS_ROOT	V-%Energy from cereals and roots
DISHAT%9504	RI-53 Disasters Nat Orig (units per 100000 persons) AV95-04
CO2FFpc0204	EM-CO2 Emiss from FossFuels (Kg pc) AV02-04
FRTCHSha0002	RE-35 Fertiliser Cons (q/ha) AV00-02
CERY_CV9506	P-Cereal Yield CV 95-06
RTY_CV9506	P-Roots&Tubers yield CV (95-06)
PULSY_CV9506	P-Pulses yield CV 95-06
H2OINTpc0307	RE-42 Int Renew Water Res (m3 pc) 2003-07
H2OAGha9802	RU-46 Water Use Agric (m3/ha)98-02
IPPP	RE-51-00 Clim Net PPP
ALPCpcAV0405	RE-Arable land&perm crops Av04-05/POP2005 (ha/person)
POPGRW%25-30	D- Population Growth Rate (%) 25-30
POPURB%2003	D-%Urban Pop 2003 (from var 18)
LIFEEXP2005	D-Life Expectancy at birth 2005 (years)
LIT%	L-Adult literacy %
LITF%/LITM%	D-Literacy Adult Fem/Mal
AARI_T_2015	L- AARI required for 2015 (Goal) Total
MOBILEAV0103	IT-Cellular subsers per 1000 people AV01-03
POPNSAV9901	D-Pop Density (n. per km2) AV99-01
AARI_B/G2015	L-AARI B to G Ratio 20015
IINSIND	RE-Coast/Area or Insularity

Note this is what could be done so far:  
**this it is not the final list !**



**Show Items**

Show Polyline

**X Axis**

Fact. 1 : 35.50 %

Fact. 2 : 15.00 %

Fact. 3 : 7.60 %

Redraw

**Y Axis**

Fact. 1 : 35.50 %

Fact. 2 : 15.00 %

Fact. 3 : 7.60 %

**Active variables**

Show

**Supplem variables**

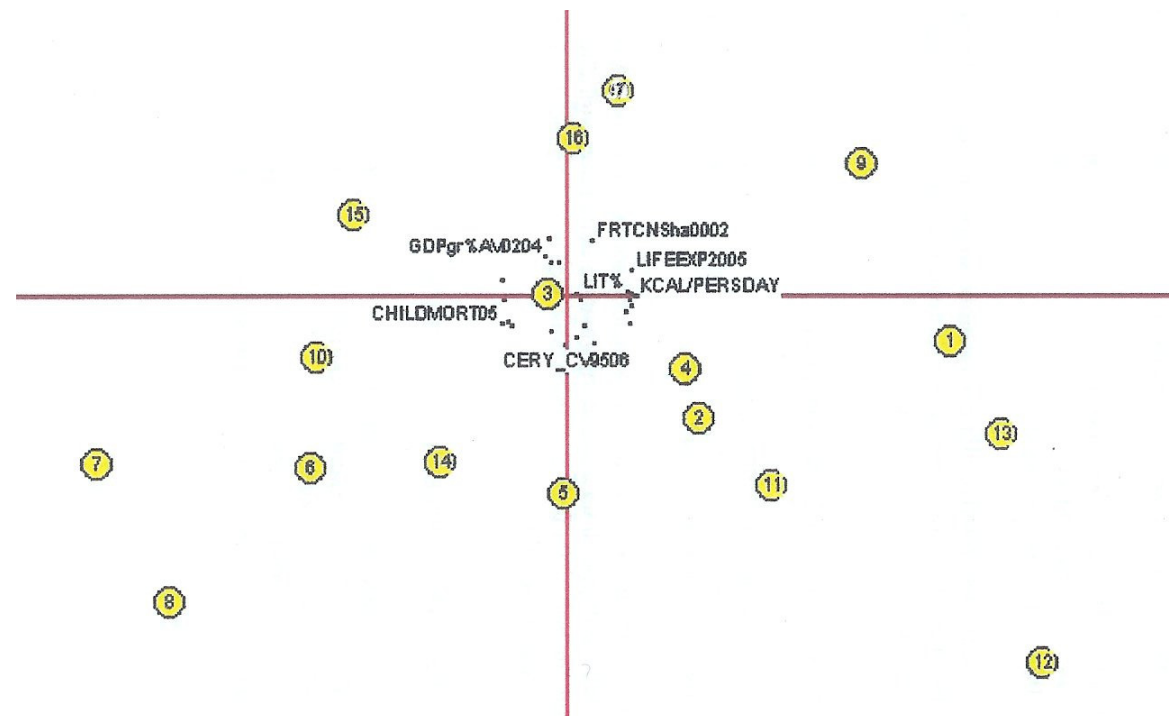
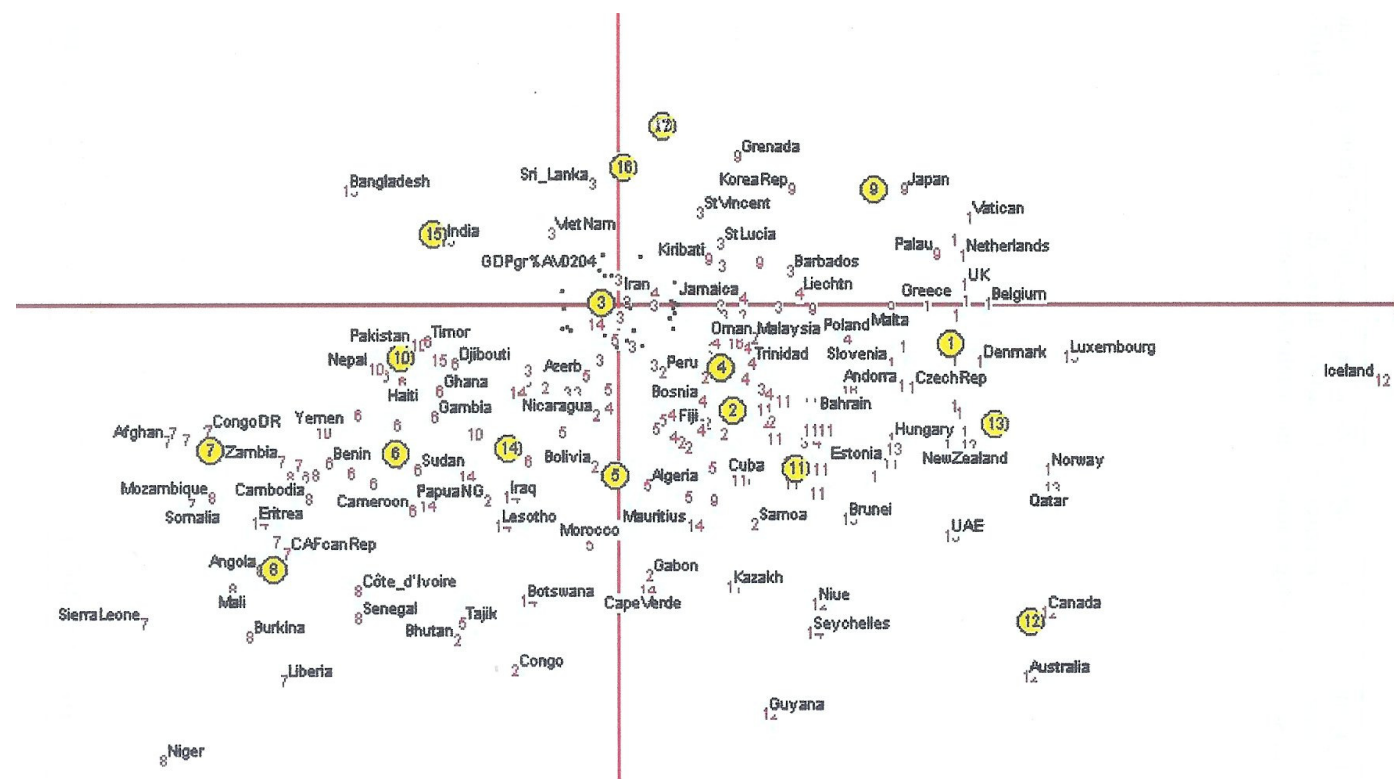
Show

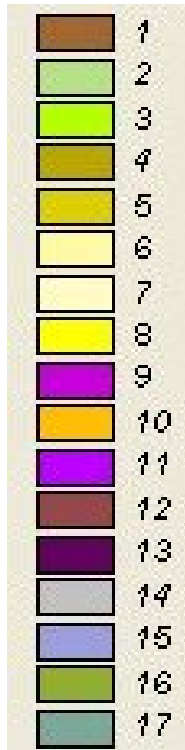
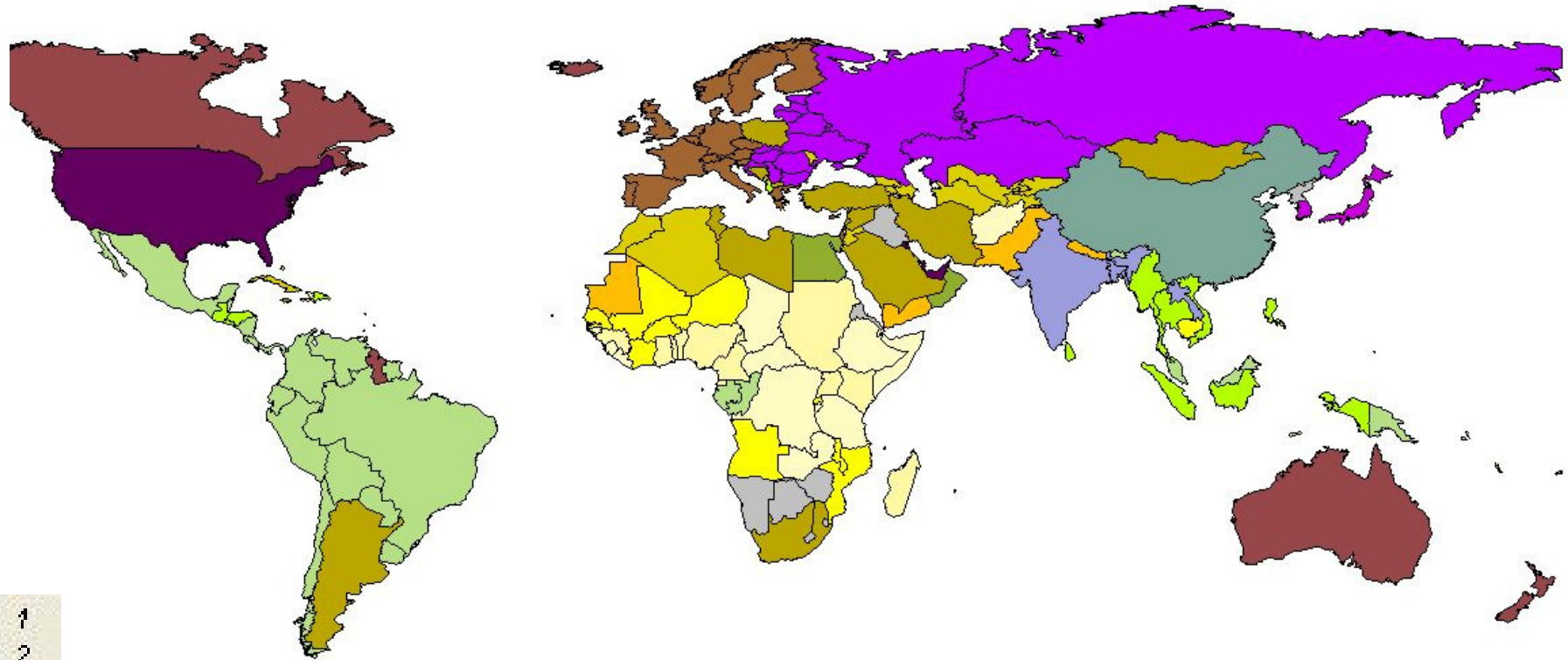
**Active units**

Show

**Supplem units**

Show





CLA	NUM	WEIG	GDPcap	GDPgr	POPGR	POPHU	CHILDM	KCAL/9	LIFEEX	LIT%	LITF%	AAR	CERY	PUL	RTY_C	ALPC	MOB	H2OIN	H2OAG	DISMA	FRTCMS	CO2EF	NPPP	POPU	FN_C	POPI	AAR	INSIN	CLA
8	10	2.2	1357	5.1	1.92	29.1	186.3	2228	59	47	6.59	2.88	0.16	0.20	0.32	0.35	21	4030	382	1963	0.09	202	1359	31.64	71	62	0.84	0.00	8
6	16	5.2	1428	4.9	1.68	18.6	151.7	2465	51	65	0.77	2.54	0.10	0.13	0.10	0.28	20	3698	629	1027	0.08	522	1497	38.45	61	99	0.89	0.00	6
14	11	1.2	1882	-0.3	1.01	35.9	98.7	2353	58	84	0.91	1.12	0.33	0.09	0.06	0.19	21	1752	3339	3997	0.77	2379	778	54.52	58	99	0.55	0.01	14
10	4	3.2	2023	4.3	1.42	24.3	96.4	2328	64	50	6.55	2.61	0.09	0.12	0.10	0.13	12	1219	6021	550	1.04	722	516	32.21	55	167	0.69	0.00	10
15	3	19.9	3280	6.4	0.83	21.2	73.9	2411	64	59	6.66	1.63	0.06	0.04	0.07	0.14	14	1203	3968	6408	1.06	1103	1570	27.83	64	436	0.77	0.00	15
3	25	8.7	4374	5.4	0.65	12.5	36.3	2668	70	90	0.94	0.48	0.08	0.08	0.13	0.17	98	9024	3100	1758	1.02	1660	2254	43.08	64	161	0.92	0.04	3
5	13	2.2	4481	5.6	0.56	12.8	48.4	2771	70	82	0.85	0.76	0.28	0.36	0.29	0.27	71	2008	4271	1416	0.50	3796	557	55.41	61	55	0.71	0.00	5
16	3	1.2	4872	3.5	1.11	4.1	32.1	3343	71	72	0.73	0.58	0.08	0.07	0.07	0.05	73	37	17542	1	3.87	2808	78	46.05	64	73	0.59	0.01	16
19	1	20.3	6757	9.2	0.18	12.0	27.0	2940	73	91	0.91	0.29	0.04	0.07	0.04	0.12	162	2130	2853	11074	2.49	3577	784	40.31	55	137	1.19	0.00	19
2	23	6.7	7744	2.9	0.75	9.8	29.5	2819	72	89	0.98	0.50	0.10	0.11	0.07	0.29	200	36665	1195	768	1.08	2385	1948	79.30	40	28	1.25	0.00	2
11	13	4.3	10094	6.8	-0.64	3.7	19.5	3069	67	99	0.99	0.72	0.17	0.25	0.13	0.76	181	16608	406	211	0.28	8359	728	67.28	45	39	1.11	0.00	11
4	16	5.3	10140	5.0	0.54	3.7	30.7	3114	69	87	0.91	0.71	0.13	0.12	0.09	0.36	215	2448	1741	2658	0.68	6206	729	68.97	51	64	0.84	0.01	4
9	10	2.8	28653	2.2	-0.47	1.9	4.4	2845	81	74	0.99	0.00	0.04	0.10	0.04	0.04	642	2835	9548	157	3.99	9685	1318	69.99	43	385	0.73	0.07	9
1	23	6.4	29829	1.6	0.04	1.3	5.0	3524	80	99	0.99	0.26	0.08	0.14	0.08	0.21	794	4032	890	289	2.07	8639	1132	76.57	30	181	1.02	0.02	1
12	6	0.9	31869	3.0	0.63	1.3	6.7	3384	80	99	1.00	0.15	0.14	0.18	0.07	1.83	490	70694	250	837	0.78	17929	658	83.67	27	4	1.29	0.02	12
13	6	4.7	41509	3.2	0.65	0.5	7.1	3754	78	99	1.00	0.46	0.11	0.05	0.06	0.58	497	9115	1367	349	1.08	21692	1017	81.61	25	32	1.22	0.00	13
OVE	195	100.0	9349	5.6	0.64	14.0	53.8	2794	68	80	0.84	1.01	0.09	0.10	0.08	0.24	181	6604	2843	4245	1.32	4209	1238	48.65	54	181	1.14	0.01	

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