#### CHAPTER SIX

# Indicators for CRISOLA

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This chapter lists the main Indicators developed during the study which were based on the expert feedback and base studies carried out in the first phases of the project.

The first section lists the Indicator table by pivots and then depicts the formulae and descriptions which serve as guidelines for the analytical functionality.

#### **Pivot: CRIME**

Code	Theme	Indicator Name	MT	IT	Comments
C1	Incidence	Number of Crimes	P	P	2012 (MT),
		by Category of Crime (C)			2010 (IT)
C2	Incidence	Number of Crimes	N/A	P	(MT),
		by Category of offender (CO)			2005 (IT)
C3	Incidence	Number of Crimes	P	P	2012 (MT),
		per 1000 persons (CR)			2010 (IT)
C4	Category	Proportion of Serious Crimes (SR)	P	P	2012 (MT),
					2010 (IT)
C5	Category	Proportion of Non-Serious Crimes	P	P	2012 (MT),
		(NSR)			2010 (IT)
C6	Police	Structure of Police	P	P	2012 (MT),
		Agencies (PA)			2012 (IT)
C7	Police	Number of Police Officers per 1000	P	P	2012 (MT),
		persons (PR)			2010 (IT)
C8	Prisons	Number of Prisoners by Type of Crime,	P	P	2009 (MT),
		Sex, Age, AT/Sent (PI)			2005 (IT)
C9	Prisons	Rate of Incarceration per 1000 persons	P	P	2012 (MT),
		(PIR)			2005 (IT)

Code	Theme	Indicator Name	MT	IT	Comments
C10	Prisons	Immigrant Inmate rate (IIR)	P	P	2012 (MT),
					2005 (IT)
C11	Prisons	Officer/Prisoner rate (OPR)	P	P	2012 (MT),
					2013 (IT)
C12	Services	Probation Officer/Probationer rate	P	P	2013 (MT),
		(OPPR)			2012 (IT)
C13	Services	Structure of Service Agencies (SA)			This indicator
					was omitted
					from the study
					and proposed
					for further
					studies
C14	Services	Services Officers per 1000 persons			This indicator
		(SOR)			was omitted
					from the study
					and proposed
					for further
					studies
	TOTAL	14			

### **Pivot: SOCIAL**

Code	Theme	Indicator Name	MT	IT	Comments
<u>S1</u>	Demography	Population (Age and Sex) (Pop)	P	P	2005 (MT),
					2010 (IT)
S2	Demography	Population Composition	P	P	2005 (MT),
		(Immigrant/Total) (PopR)			2007 (IT)
S3	Education	Educational Attainment (EDR)	P	-	2005 (MT),
					(IT)
S4	Education	Early School Leaving (ESLR)	P	P	2013 (MT),
					2004 (IT)
S5	Employment	Main employment structure (ES)	P	P	2005 (MT),
					2004 (IT)
<u>S6</u>	Employment	Unemployment Rate (UR)	P	P	2005 (MT),
					2012 (IT)

Code	Theme	Indicator Name	MT	IT	Comments
S7	Economy	Main Economic Drivers (ED)	P	P	2005 (MT), 2010 (IT)
S8	Economy	Economic Dependence on State (EDS)	N/A	P	(MT), 2010 (IT)
S9	Rehabilitation	Rehabilitation programmes (RPR)	-	-	This indicator was omitted from the study and proposed for further studies
S10	Rehabilitation	Programme Success Rate (PSR)	-	-	This indicator was omitted from the study and proposed for further studies
S11	Professionals	Availability of Rehabilitation Professional Services (professionals per 1000 persons) (RSP)	P	P	2010 (MT), 2010 (IT)
S12	Professionals	Professional Services Graduates (PSG)	-	-	This indicator was omitted from the study and proposed for further studies
S13	Community	Social and Community Facilities (Social Capital) (SCF)	P	P	2012 (MT), 2010 (IT)
S14	Community		-	-	This indicator was omitted from the study and proposed for further studies
	TOTAL	14			

### **Pivot: LANDUSE**

Code	Theme	Indicator Name	MT IT		Comments
L1	Island Type	Size of Island (sq. km) (SI)	P	P	2012 (MT),
					2010 (IT)
L2	Island	Island Distance to Mainland (IDM)	N/A	P	(MT),
	Admin				2010 (IT)
L3	Town	Category of Town (Village, town,	P	P	2012 (MT),
	Insularity	city) (CT)			2008 (IT)
L4	Town	Structural Insularity - Metropolis,	P	P	2012 (MT),
	Insularity	Satellite, Isolated (Town, Village,			2008 (IT)
	•	Hamlet) (SIT)			
L5	Landuse	Main Landuse/Landcover (MLL)	P	P	2012 (MT),
					2006 (IT)
L6	Landuse	Secondary Landuse/Landcover	P	P	2012 (MT),
		(SLL)			2006 (IT)
L7	Housing	Main Housing Category (H)	P	P	2005 (MT),
	_				2010 (IT)
L8	Housing	Housing Availability – Emigration	P	P	2012 (MT),
		Driver (HA)			2010 (IT)
L9	Status	Dilapidation/Ruins (DRR)	P	N/A	2012 (MT),
					(IT)
L10	Status	Rustbelt/Sunshine Status (RSS)	P	N/A	2012 (MT),
					(IT)
L11	Transport	Distance to main Island City (DMC)	P	P	2012 (MT),
					2010 (IT)
L12	Transport	Distance to State Capital City (DSC)	P	P	2012 (MT),
	-				2010 (IT)
	TOTAL	12			

# First Pivot Indicators: CRIME Aspect

Code	Theme	Indicator Name
C1	Incidence	Number of Crimes by Category of Crime (C)
C2	Incidence	Number of Crimes by Category of Offender (CO)
C3	Incidence	Number of Crimes per 1000 persons (CR)
C4	Category	Proportion of Serious Crimes (SR)
C5	Category	Proportion of Non-Serious Crimes (NSR)
C6	Police	Structure of Police Agencies (PA)
C7	Police	Number of Police Officers per 1000 persons (PR)
C8	Prisons	Number of Prisoners by Type of Crime, Sex, Age, AT/Sent (PI)
C9	Prisons	Rate of Incarceration per 1000 persons (PIR)
C10	Prisons	Immigrant Inmate rate (IIR)
C11	Prisons	Officer/Prisoner rate (OPR)
C12	Services	Probation Officer/Probationer rate (OPPR)
C13	Services	Structure of Service Agencies (SA)
C14	Services	Services Officers per 1000 persons (SOR)

Indicator Code C1: Incidence

Indicator Name Number of Crimes by Category of Crime (C)

Description Number of Crimes reported in Year N [No] Total

Formula C = N(Y)

C = Crimes by Category reported to the Police in Year

N = Number of Crimes

Y = Last complete year in which data was gathered

Data required for indicator completion	
Date of Report	
Scale (NUTS level)	
Type of file	
Source	
Comments	

Note: Date of Report, Scale (NUTS level), Type of file, Source and Comments were repeated for every indicator and were hence removed from the following pages.

Indicator Code C2: Incidence

Indicator Name Number of Crimes by Category of Offender (CO)

Description Number of Crimes reported in Year N [No] by Offender Type

Formula CO = N(Y)(O)

C = Crimes by Category reported to the Police in Year

N = Number of Crimes

*O* = *Offender Category (Local/Immigrant)* 

Indicator Code

C3: Incidence

Indicator Name Description

Number of Crimes per 1000 persons (CR)

Number of Crimes reported in Year N per 1000 persons [Rate]

CR = C / Pop (Y) \* 1000

Formula

CR = Crimes per 1000 persons

C = Crimes reported to the Police in Year

Pop = Population

Y = Last complete year in which data was gathered

Indicator Code

C4: Category

Indicator Name Description

**Proportion of Serious Crimes (SR)\*** 

Proportion of Serious Crimes in comparison

to Total Crimes reported in Year N [%]

Formula

SR = SC / C (Y) \*100

 $SR = Rate \ of \ Serious \ Crimes$ 

*SC* = *Serious Crimes* 

C = Crimes reported to the Police in Year

Y = Last complete year in which data was gathered

\* Serious Crimes (Categories Classification) Most Serious: Assaults, Drug offenses,

Attempted homicide, Intentional homicide, Rapes, Robberies

Least Serious: Automobile theft, Bribery crimes,

Burglaries, Frauds, Thefts (Aggravated)

Non Serious: All other offences (Source: Formosa (2007) Pg. 188) Indicator Code C5: Category

Indicator Name Proportion of Non-Serious Crimes (NSR)\*

Description Proportion of Non-Serious Crimes in comparison

to Total Crimes reported in Year N [%]

Formula NSR = NSC / C(Y) \*100

*NSR* = *Rate of Non-Serious Crimes* 

*NSC* = *Non-Serious Crimes* 

C = Crimes reported to the Police in Year

Y = Last complete year in which data was gathered

\* Categories Classification

Most Serious: Assaults, Drug offenses, Attempted homicide,

Intentional homicide, Rapes, Robberies

Least Serious: Automobile theft, Bribery crimes, Burglaries,

Frauds, Thefts (Aggravated) Non Serious: All other offences (Source: Formosa (2007) Pg. 188)

Indicator Code C6: Police

Indicator Name Structure of Police Agencies (PA)

Description List of Police Agencies and Roles [Desc]

Formula Descriptive

Police Agency Name

Agency Role Jurisdiction

Reporting Structure

*Integration Potential (Inter-agency communication)* 

Indicator Code C7: Police

Indicator Name Number of Police Officers per 1000 persons (PR)

Description Number of Police Officers per 1000 persons

in Year N [Rate] by type of Police Body Category

Formula PR = PO / Pop (Y) \* 1000

PR = Police Officers per 1000 persons

PO = Police Officers in Year

Pop = Population

Y = Last complete year in which data was gathered

Indicator Code C8: Prisons

Indicator Name Number of Prisoners by Type of Crime, Sex, Age, AT/Sent (PI)

Description Number of Prisoners reported in Year N [No] Formula PI = NPI(Y)(C)(S)(A)(AT/SE/BA/CSO/SS/PO)

PI = Prisoners in Year NPI = Number of Inmates

Y = Last complete year in which data was gathered

C = Offence by CategoryS = Sex (Male - Female)

A = Age Group (0-4, 5-9, 10-14, 15-19...)

AT = Awaiting Trial (Remanded)

SE = SentencedBA = Bail

CSO = Community Service Order

SS = Suspended Sentence PO = Probation Order Indicator Code C9: Prisons

Indicator Name Rate of Incarceration per 1000 persons (PIR)

Description Number of Prisoners Incarcerated in Year N

per 1000 persons [Rate] by type of sentence

Formula PIR = NPI / Pop (Y) \* 1000 (AT/SE/BA/CSO/SS/PO)

PIR = Prisoners per 1000 persons

NPI = Number of Inmates

Pop = Population

Y = Last complete year in which data was gathered

AT = Awaiting Trial (Remanded)

SE = SentencedBA = Bail

*CSO* = *Community Service Order* 

SS = Suspended Sentence PO = Probation Order

Indicator Code C10: Prisons

Indicator Name Immigrant Inmate rate (IIR)

Description Proportion of Immigrant Inmates in comparison

to Total Inmates reported in Year N [%]

Formula IIR = II / NPI (Y) \*100

*IIR* = *Rate of Immigrant Inmates* 

II = Immigrant Inmates NPI = Number of Inmates

Indicator Code C11: Prisons

Indicator Name Officer/Prisoner rate (OPR)

Description Ratio of Prison Officers as against

Number of Prisoners incarcerated in Year N [Ratio]

Formula OPR = OP / NPI (Y)

*OPR* = *Rate of Prison Officers as against Inmates* 

OP = Prison Officers NPI = Number of Inmates

Y = Last complete year in which data was gathered

Indicator Code C12: Services

Indicator Name **Probation Officer/Probationer rate** (OPPR)

Description Ratio of Probation Officers as against

Number of Probationers incarcerated in Year N [Ratio]

Formula OPPR = OPP / NPP (Y)

*OPPR* = *Rate of Probation Officers as against Probationers* 

OPP = Probation Officers NPP = Number of Probationers

Indicator Code C13: Services

Indicator Name Structure of Service Agencies (SA)

Description List of Service Agencies and Roles [Desc]. To be sub-categorised

by type of agency service, types of crimes covered and types of offenders.

Formula Descriptive

Service Agency Name

Agency Role Jurisdiction

Reporting Structure

Integration Potential (Inter-agency communication)

Indicator Code C14: Services

Indicator Name Services Officers per 1000 persons (SOR)

Description Number of Services Officers per 1000 persons in Year N [Rate]

Formula SOR = SO / Pop (Y) \* 1000

*SOR* = *Services Officers per 1000 persons* 

SO = Services Officers in Year

Pop = Population

## **Second Pivot Indicators: SOCIAL Aspect**

Indicator Code	Theme	Indicator Name
S1	Demography	Population (Age and Sex) (Pop)
S2	Demography	Population Composition (Immigrant/Total) (PopR)
S3	Education	Educational Attainment (EDR)
S4	Education	Early School Leaving (ESLR)
S5	Employment	Main employment structure (ES)
S6	Employment	Unemployment Rate (UR)
S7	Economy	Main Economic Drivers (ED)
S8	Economy	Economic Dependence on State (EDS)
S9	Rehabilitation	Rehabilitation programmes (RPR)
S10	Rehabilitation	Programme Success Rate (PSR)
S11	Professionals	Availability of Rehabilitation Professional Services (professionals per 1000 persons) (RSP)
S12	Professionals	Professional Services Graduates (PSG)
S13	Community	Social and Community Facilities (Social Capital) (SCF)
S14	Community	Cohesion Level (Social Cohesion) (CLS)

Indicator Code S1: Demography

Formula Pop = P(A)(S)(Y)

*Pop = Population Structure by age and sex* 

P = Population Number

 $A = Age\ Group\ (0-4,\ 5-9,\ 10-14,\ 15-19...)$ 

S = Sex (Male, Female)

Indicator Code S2: Demography

Indicator Name Population Composition (Immigrant/Total) (PopR)

Description Proportion of Immigrants in comparison to Total Population in Year N [%]

Formula PopR = PopI / Pop (Y) \*100

PopR = Ratio of Immigrant population PopI = Immigrant population by age and sex Pop = Population Structure by age and sex

Y = Last complete year in which data was gathered

Indicator Code S3: Education

Indicator Name Educational Attainment (EDR)

Description Proportion of Population by Educational Attainment in Year N [%]

Formula EDR = PopED / Pop (Y) \*100

*EDR* = *Ratio* of *Attainment* by category of highest

educational level attained

*PopED* = *Number of population by age and sex by attainment* 

Pop = Population Structure by age and sex

Y = Last complete year in which data was gathered

Indicator Code S4: Education

Indicator Name Early School Leaving (ESLR)

Description Early School Leaving Rate in comparison

to Total Population in Year N [%]

Formula ESLR = ESL / Pop (Y) \*100

ESLR = Ratio of Early school leavers ESL = Early School Leavers by age and sex Pop = Population Structure by age and sex

Indicator Code S5: Employment

Indicator Name Main employment structure (ES)

Description Main employment categories reported in Year N [No]

Formula ES = NE(Y)

ES = Main employment structure by category in Year NE = Number of employees by category by age and sex Y = Last complete year in which data was gathered

Indicator Code S6: Employment

Indicator Name Unemployment Rate (UR) Formula UR = U / Pop(A)(S)(Y)

UR = Unemployed by age and sex U = Unemployed Population Number Pop = Population Structure by age and sex A = Age Group (0-4, 5-9, 10-14, 15-19...)

S = Sex (Male, Female)

Y = Last complete year in which data was gathered

Indicator Code S7: Economy

Indicator Name Main Economic Drivers (ED)

Description Main economic categories in Year N [Desc]

Formula Descriptive

Primary Driver (Category of Activity, ex agriculture, service)

Secondary Driver (Category of Activity) Tertiary Driver (Category of Activity) Indicator Code S8: Economy

Indicator Name Economic Dependence on State (EDS)

Description Level of Economic Dependence on central government [Desc]

Formula Descriptive

High Dependence (No income generation)

Medium Dependence Low Dependence Self-Sufficient

Indicator Code S9: Rehabilitation

Indicator Name Rehabilitation programmes (RPR)

Description Number of rehabilitation programmes

per 1000 persons in Year N [Rate]

Formula RPR = RP / Pop (Y) \* 1000

*RPR* = *Rehabilitation Programmes per 1000 persons* 

RP = Rehabilitation Programmes in Year

Pop = Population

Y = Last complete year in which data was gathered

Indicator Code **\$10: Rehabilitation** 

Indicator Name Programme Success Rate (PSR)

Description Number of Successful rehabilitation per programme

population in Year N [No]

Formula PSR = RPG / RPop (Y) \* 100

PSR = Programme success rate per 1000 persons RPG = Rehabilitation Programmes Graduants in Year RPop = Rehabilitation Programmes Population

Indicator Code S11: Professionals

Indicator Name Availability of Rehabilitation Professional Services

(professionals per 1000 persons) (RSP)

Description Number of Professionals in Rehabilitation reported in Year N [No]

Formula RSP = PSO / Pop (Y) \* 1000

RSP = Professional Services Officers per 1000 persons

PSO = Professional Services Officers in Year

Pop = Population

Y = Last complete year in which data was gathered

Indicator Code S12: Professionals

Indicator Name Professional Services Graduates (PSG)

Description Number of Professional Services Graduates in Year N [No]

Formula PSG (Y)

*PSG* = *Number* of professionals graduation

in the Social, psychological and other related studies.

Indicator Code S13: Community

Indicator Name Social and Community Facilities (Social Capital) (SCF)

Description Number of Social and Community Facilities (PREFE)

reported in Year N [No]

Formula SCF = NSC \* PREFE (Y)

SCF = Presence of social and community facilities (structures) in Year NSC = Number of Facilities (1 point for each of the PREFE structures)

PREFE = Political, Religious, Economic, Family, Educational

Indicator Code **S14: Community** 

Indicator Name Cohesion Level (Social Cohesion) (CLS)

Description Presence of Social Cohesion activities in Year N [Desc]

Formula CLS = SCF \* AC (Y)

CLS = Cohesive levels in Year

 $SCF = Presence \ of \ social \ and \ community \ facilities$   $AC = Number \ of \ Activities \ partaken \ to \ in \ each$ 

of the PREFE (1 point for each activity)

### Third Pivot Indicators: LANDUSE Aspect

Indicator Code	Theme	Indicator Name	
L1	Island Type	Size of Island (sq. km) (SI)	
L2	Island Admin	Island Distance to Mainland (IDM)	
L3	Town Insularity	Category of Town (Village, town, city) (CT)	
L4	Town Insularity	Structural Insularity - Metropolis, Satellite, Isolated (Town, Village, Hamlet) (SIT)	
L5	Landuse	Main Landuse/Landcover (MLL)	
L6	Landuse	Secondary Landuse/Landcover (SLL)	
L7	Housing	Main Housing Category (H)	
L8	Housing	Housing Availability – Emigration Driver (HA)	
L9	Status	Dilapidation/Ruins (DRR)	
L10	Status	Rustbelt/Sunshine Status (RSS)	
L11	Transport	Distance to main Island City (DMC)	
L12	Transport	Distance to State Capital City (DSC)	

Indicator Code L1: Island Type

Indicator Name Size of Island (sq. km) (SI)\*

Description Size of Island [Area]

Formula SI (Y)

SI = Area in Km. Sq.

Y = Last complete year in which data was gathered

\* Note to include any external islands

Indicator Code L2: Island Type

Indicator Name Island Distance to Mainland (IDM)

Description Island Distance to nearest Continental mainland in Year N [Km]

Formula IDM (Y)

IDM = Island Distance (centroid) from mainland centroid in Year

Y = Last complete year in which data was gathered

Indicator Code L3: Town Insularity

Indicator Name Category of Town (city, town, village) (CT)\*

Description Main Town category in Year N [Desc]

Formula CT (Y)

 $CT = Town \ category \ in \ Year$ 

*Y* = *Last complete year in which data was gathered* \* *Categories include (metropolis, large city, small city,* 

town, village, hamlet, isolated units)

Indicator Code L4: Town Insularity

Indicator Name Structural Insularity - Metropolis, Satellite,

Isolated (Town, Village, Hamlet) (SIT)

Description Level of Insularity in Year N [No]

Formula SIT (Y)

*SIT* = *Town level of insularity in Year* 

(category in terms of aggregation – conurbation) in Year Y = Last complete year in which data was gathered

Indicator Code L5: Landuse

Indicator Name Main Landuse/Landcover (MLL)

Description Main Type of Landuse/Landcover in Year N [No]

Formula MLL (Y)

MLL = Main Landuse / landcover as per CLC in Year

N = Number of Crimes

Y = Last complete year in which data was gathered

Indicator Code L6: Landuse

Indicator Name Secondary Landuse/Landcover (SLL)

Description Secondary Type of Landuse/Landcover in Year N [No]

Formula SLL (Y)

SLL = Secondary Landuse / landcover as per CLC in Year

N = Number of Crimes

Y = Last complete year in which data was gathered

Indicator Code L7: Housing

Indicator Name Main Housing Category (H)

Description Main Housing Types reported in Year N [No]

Formula H = NH(Y)

H = Main Housing Categories in Year

*NH* = *Number of Residential Units by Type* 

Indicator Code L8: Housing

Indicator Name Housing Availability – Emigration Driver (HAR)

Description Proportion of Vacant Housing in comparison

to Total Housing reported in Year N [%]

Formula HAR = VH / H (Y) \*100

 $HAR = Rate \ of \ Housing \ Availability$   $VH = Vacant \ Housing \ Categories \ in \ Year$  $H = Main \ Housing \ Categories \ in \ Year$ 

Y = Last complete year in which data was gathered

Indicator Code L9: Status

Indicator Name Dilapidation/Ruins (DRR)

Description Proportion of Dilapidated Buildings /

Ruins in comparison to Total Buildings reported in Year N [%]

Formula DRR = DR / TotB (Y) \*100

DRR = Rate of dilapidated Buildings / ruins DR = Number of dilapidated Buildings / ruins

TotB = Total Number of Buildings

Y = Last complete year in which data was gathered

Indicator Code L10: Status

Indicator Name Rustbelt/Sunshine Status (RSS)
Description Industrial Status of Town [Desc]

Formula Descriptive

Old Rustbelt New Rustbelt Old Sunshine New Sunshine

Other

Indicator Code L11: Transport

Indicator Name Distance to main Island City (DMC)

Description Distance to nearest Island City in Year N [Km]

Formula DMC (Y)

*DMC* = *Town Distance (centroid) from island city centroid in Year* 

Y = Last complete year in which data was gathered

Indicator Code L12: Transport

Indicator Name Distance to State Capital City (DSC)

Description Distance to the State Capital City in Year N [Km]

Formula DSC (Y)

DSC = Town Distance (centroid) from State Capital city centroid in Year