

**Republic of Yemen**  
**Ministry of Planning &**  
**Int'l Cooperation**  
**Central Statistical Org.**



Central Statistical Organization

**CSO**

## **Vision**

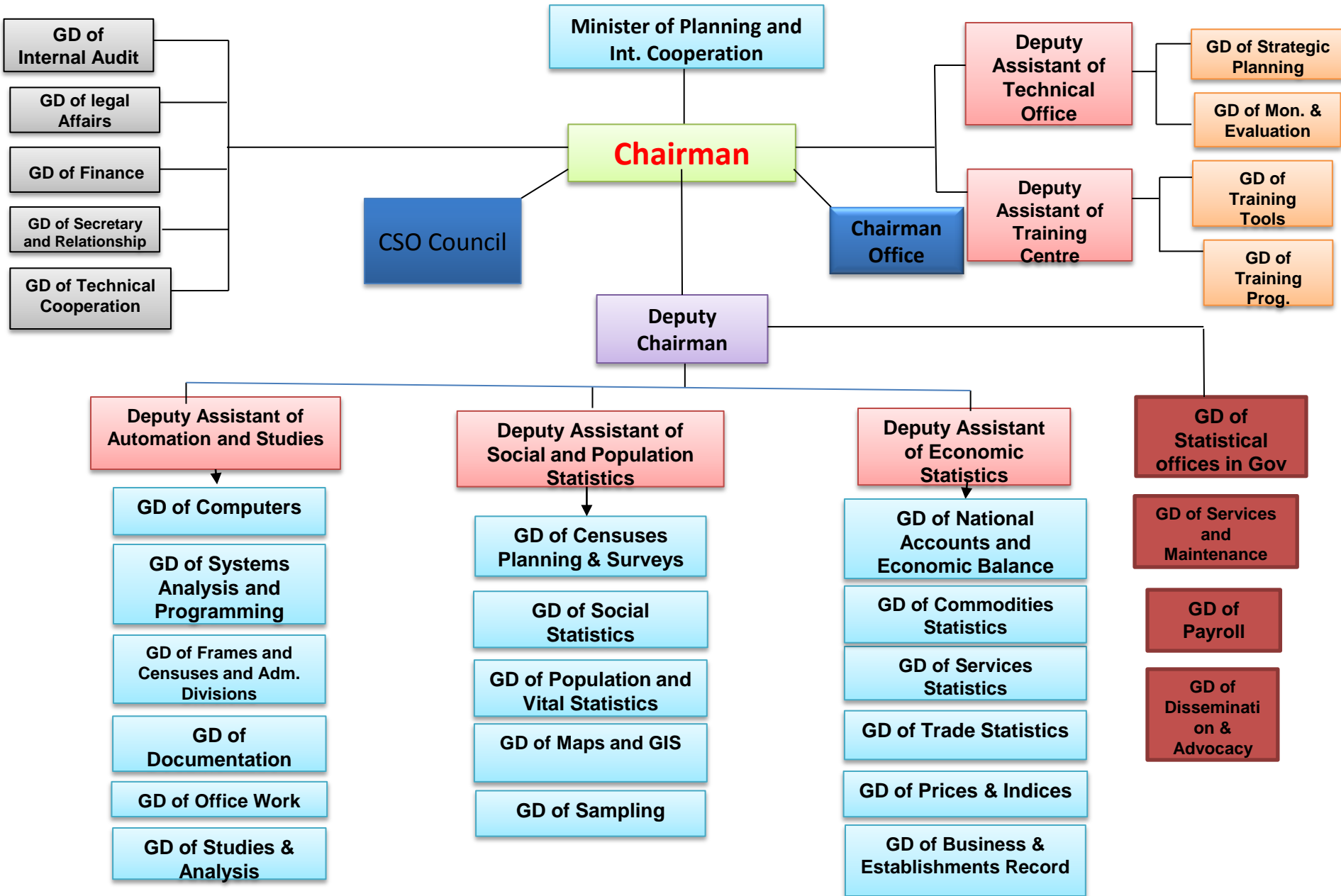
*Establish and develop statistical system which meet development needs of statistical indicators and to be in line with continuous technical developments.*

## An overview of the Central Statistical Organization in Yemen

→ *The Central Statistical Organization founded as an official autonomous agency in 1990 during the blessed Yemeni Unification*

→ *The Statistical law no. (28) for 1995 is considered the legitimate frame of Yemeni statistical system*

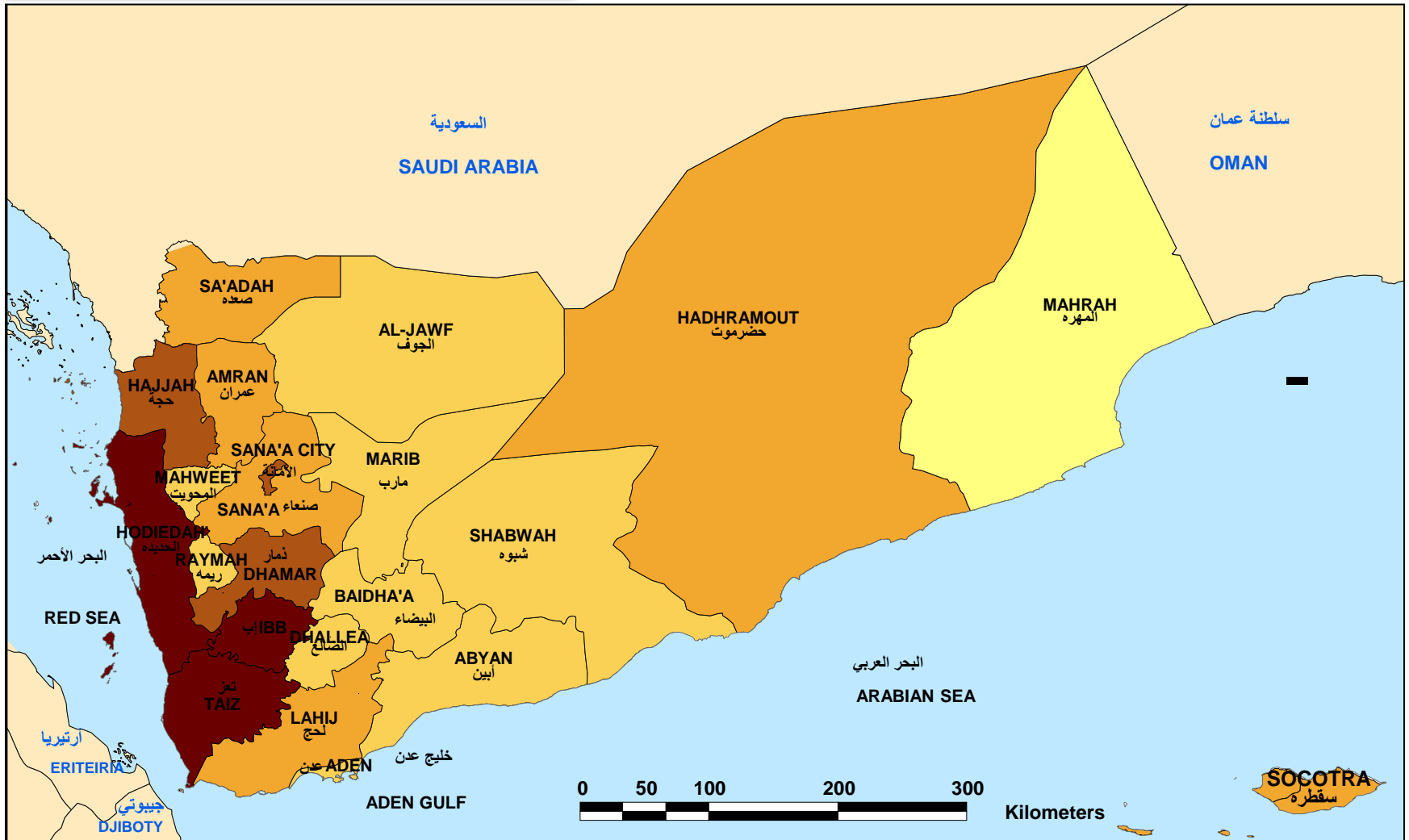
# Structure of CSO:



# Responsibilities and Duties of CSO:

- *Prepare Statistical systems to collect statistical data.*
- *Set up statistical surveys, census plans and projects (comprehensive or sampling).*
- *Participate in designing statistical systems to follow up implementation of economic and social development plans.*
- *Participate in unifying statistical concepts, standards, definitions and terminologies.*
- *Collect statistical data and information concerning all resources and uses.*
- *Implement public views surveys on economic and social issues in the country.*
- *Follow up various changes in statistics.*
- *Maintain and activate statistical law to improve quantitative and qualitative statistics.*
- *Adopt statistical data produced through other entities after processing and verifying data.*
- *Advocate and raise statistics awareness.*
- *Enhance relationships and strengthen collaboration with other agencies and organizations*

# Map of Yemen :



Governorates	Districts	Sub-districts	Cities	Villages	Sub-villages	Islands
21	333	1996	225	40.739	88.817	216

# Yemen in Figures

## - Significant Indicators on Yemen:

- *Population of Yemen estimated of 24.527.000 in 2012. according to the population projection of (2005-2025).*
- *Ratio of gender is 103.7 male per 100 female.*
- *Ratio of urban population is 28.85%.*
- *Ratio of rural population is 71.15%.*
- *Population growth rate is 3%.*
- *Unemployment rate is 17.8% in 2010.*
- *Annual inflation rate for consumer prices is 23.17% for 2011 .*
- *Per capita average of GDP is USD \$1.149 for 2011.*

## Key Activities at CSO During 2012-2013

- ✓ *Population, Housing & Establishments Census 2014.*
- ✓ *Multi-Purposes Household Budget Survey*
- ✓ *Labor Force Survey*
- ✓ *Economic and Service Surveys and Projects (22 activities)*
- ✓ *Upgrading National Accounts System from 1993 to 2008*
- ✓ *Update Key Service Map 2013*
- ✓ *Producer Prices Index (PPI)*
- ✓ *International Trade Survey in Services and FDI*
- ✓ *Periodicity of Food Security Information System (FSIS)*

## Key Publications of CSO During 2012-2013

- *Yearly Statistical Book*
- *Final findings of service and economic surveys (22 activities)*
- *Foreign trade bulletin*
- *National Accounts bulletin*
- *Consumer Prices Indices (CPI) bulletin*
- *MDGs Indicators*
- *Diverse publications and different activities implemented and produced at CSO*

- You can visit below website:

[www.cso-yemen.org](http://www.cso-yemen.org)



## Main Achievements of CSO Till the Beginning of 2013

- ❖ *Conduct training programs local and abroad.*
- ❖ *Strengthen capacity building of staff, census coordination unit, statistical units at governorates and data sources.*
- ❖ *Update database of statistical indicators.*
- ❖ *Found and update Geographic Information System and comprehensive geographic database.*
- ❖ *Improve CSO with equipments and materials.*
- ❖ *Strengthen partnership with data sources and users.*
- ❖ *Strengthen partnership with donor community and regional & international organizations.*
- ❖ *Obtain an award after a competition of best statistical work on key services map project named as (Statistical Atlas).*
- ❖ *Prepare and update the Statistical Master Plan 2012-2015.*
- ❖ *Produce tourist maps, election divisions maps and services map.*

Presentation of the Republic of Yemen

On

Census 2014 Plan of Population,  
Housing & Establishments

**Dr. Hasan T. Farhan**

*Chairman of CSO - Yemen*

# Summary of contents of Census 2014 Plan

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**First part**  
**Summary of Adm., Fiscal and Technical Assessment for Census 2004 Methodology and Documents and Lessons learnt**

**Second Part**  
**Planning Methodology of Census 2014**

## An Overview on Censuses implemented During 1973 - 2004

**First: Censuses Implemented before Unification of Yemen and geographic Coverage:**

<b>Census Year</b>	<b>Geographic Coverage</b>	<b>Population</b>
<b>1973</b>	South Gov.	<b>1.590.275</b>
<b>1975</b>	North Gov.	<b>6.471.893</b>
<b>1986</b>	North Gov.	<b>9.274.137</b>
<b>1988</b>	South Gov.	<b>2.345.266</b>

**Second: Censuses Conducted after Unification of Yemen in 1990:**

<b>Census Year</b>	<b>Geographic Coverage</b>	<b>Population</b>
1994	Republic of Yemen	<b>14.587.807</b>
2004	Republic of Yemen	<b>19.685.807</b>

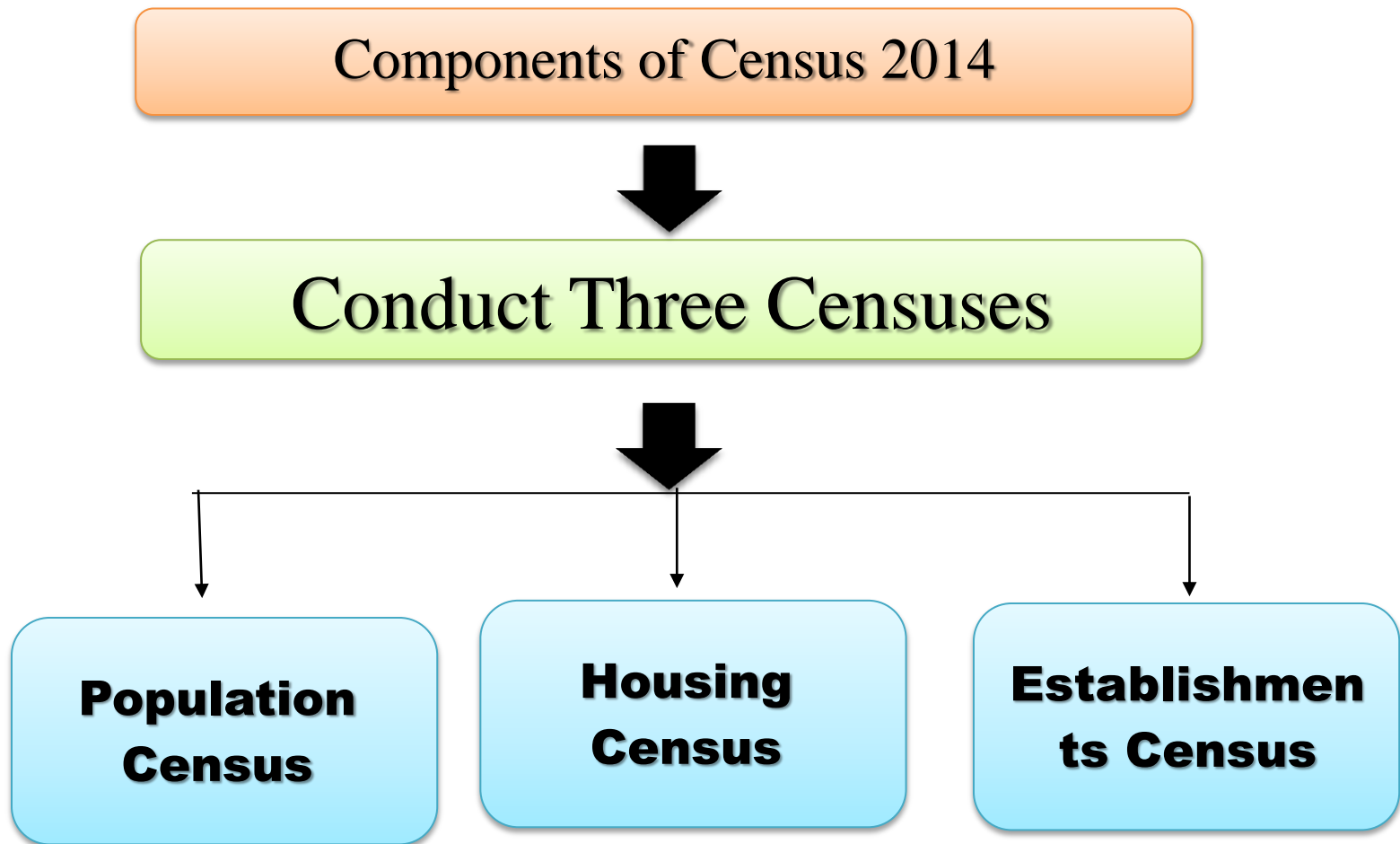
**Census 2014 is the third Census after Unification and the Fifth in Yemen**

## Procedures of Document Preparation

- ❖ The following procedures have been achieved to prepare census document after issuance of the republican decree no. (107) for 2011 concerning the implementation of Population, Housing and Establishments census 2014:
- ❖ Evaluate methodology and documents of census 2004
- ❖ Identify legal and organizational frame, tasks and responsibilities of census 2014
- ❖ Evaluate previous and current condition of infrastructure
- ❖ Specify fiscal, technical and human needs
- ❖ Identify appropriate timeline/activities
- ❖ Estimate work load and staff number at the level of governorates at earlier time
- ❖ Taking best practices of other countries and follow UN recommendations on censuses
- ❖ Enhance capacity building at different stages
- ❖ Propose new mechanisms to activate CSO partnership with donor community and data users at earlier time
- ❖ prepare new conceptions and strategies for data processing and dissemination

# Conceptual Framework of Census 2014

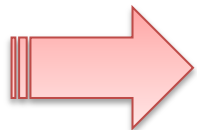
- ❖ **The population, housing and establishments census 2014 is one of the major components of official statistics at all states**



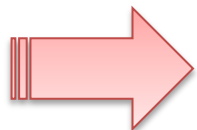
## Importance of Census 2014:

- ❖ **Provide comprehensive statistical database on population, housing and establishments.**
- ❖ **Update statistical database for demographic, social and economic beside all administrative divisions.**
- ❖ **Census data are deemed as key tool to programming, planning, monitoring, and following up process for different activities related to public sectors.**
- ❖ **Facilitate concerned staff to distribute key services among geographic and administrative components.**
- ❖ **Facilitate concerned authorities to set up economic and social development plans.**

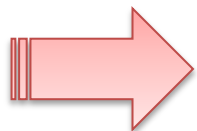
## Census 2014 Objectives:



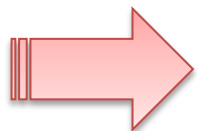
1- Provide population size, growth rate and its trends, natural increase rates, geographic, sex and age composition beside their demographic, social and economic characteristics at administrative divisions level and urban status.



2- Recognize to population movement load, labor force within governorates in order to measure the internal migration rates and its characteristics beside extracting updated statistical indicators on external migration.



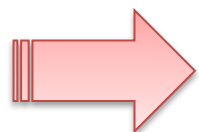
3- Provide demographic, social and economic indicators to establish social and economic development plans.



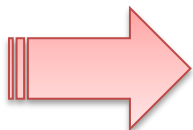
4- Provide updated statistical database on special groups and consequently strategic plans and accurate policies to improve educational, livelihood and healthy conditions of these groups.



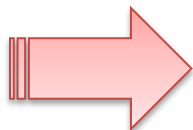
## Census 2014 Objectives:



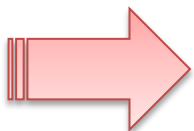
5- Provide updated statistical database which would facilitate updating various national strategies for population, women, childhood, youth, poverty, etc...



6- Update statistical indicators and database of poverty to facilitate concerned authorities and develop alleviating mechanisms to the way of achieving MDGs.

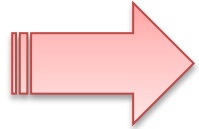


7- Provide a statistical database for civil registry to streamline building an integrated system of national ID.

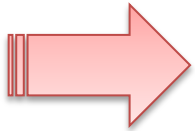


8- Acquire accurate frame for sampling to different surveys being conducted through the national statistical office.

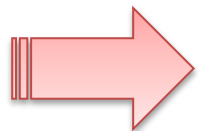
## Census 2014 Objectives:



9- Update databases of establishments, housing and buildings which will facilitate designing accurate policies on urban development and cities delineation beside services distribution through comprehensive development.



10- Update database of key services map which will be utilized in services planning and development projects at all administrative divisions level of State.



11- Utilize various updated data of Census 2014 to carry out in-depth studies concerning demographic, social and economic aspects which will serve and help decision makers.

# Key Characteristics of Censuses:

## Individual Counting

It means that enumerating unit is the Household including members who live mutually whereas individual is the enumerating unit for population who reside at general housing, housing is the enumerating unit of housing Census, establishment is for the establishment census.

## Coverage

It means that Census will cover the whole geographic areas of the State without omitting or duplicating any components of (enumerating unit), maps lead a major role in this part.

## Concurrency

Reference period night of all data is the Census day, in some cases it differs regarding to the work status of individual during the past week prior to the census day.

## Periodicity

Censuses implement on periodical timeliness periods every ten years

## Uses of Census Results:

**Population Census**

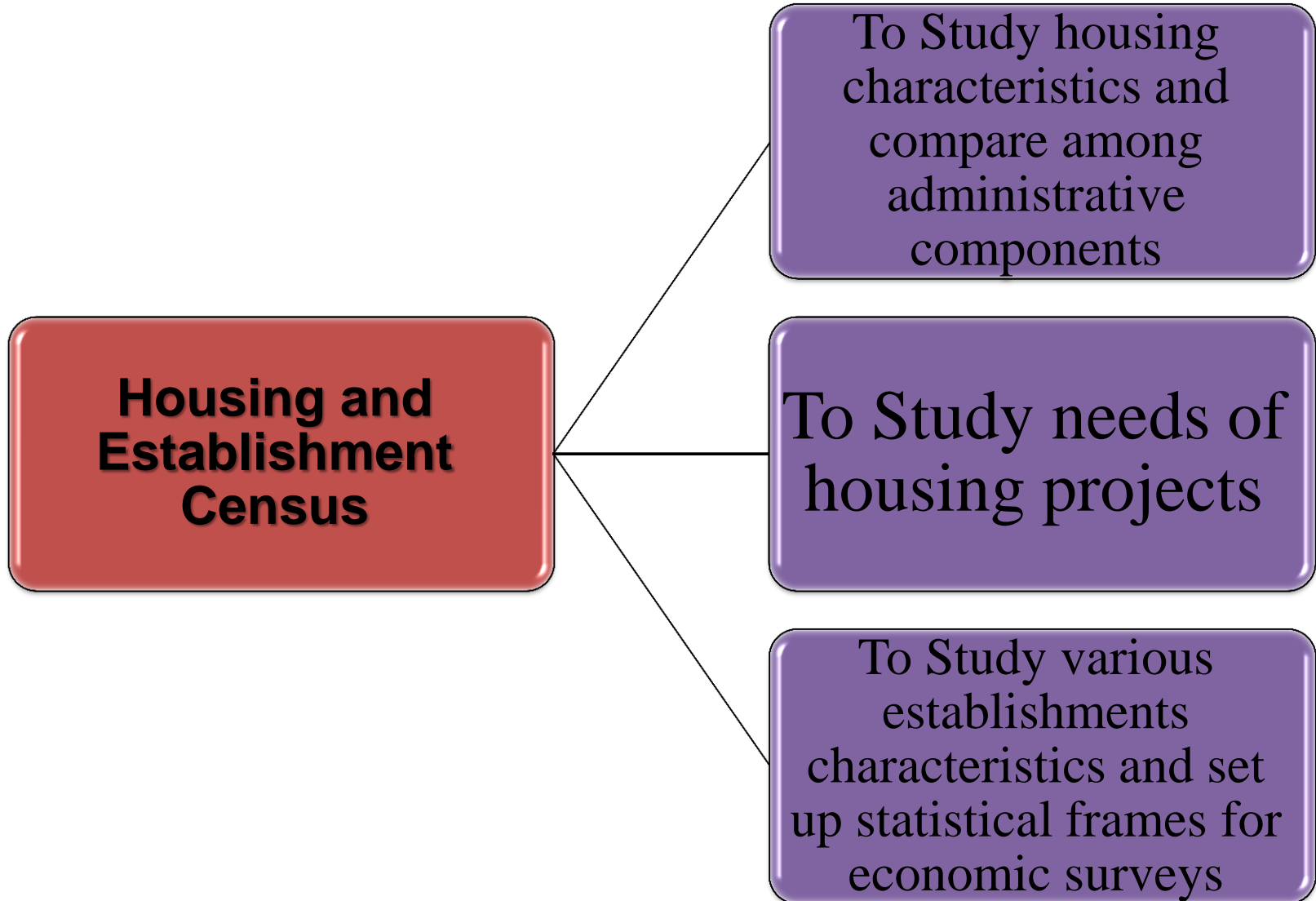
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For making policies,  
planning and administrative  
purposes

Research objectives

Business, enterprises, labor  
and industrial purposes

## Uses of Census Results:



## **Legal Frame of Census 2014:**

### **Republican decree:**

**Decree no. (107) for 2011 to conduct Population, Housing and Establishments Census 2014 in the Republic of Yemen**

### **Cabinet Decrees:**

- Decree no. (119) for 2011 indicate adopting Republican Decree to conduct the Census**
- Decree no. (16) for 2012 indicate forming up the Supreme Committee of Census and specify its tasks and responsibilities**
- Decree no. (204) indicates adopting Census 2014 Document during 2012-2018**

### **Decree of Minister of Planning and Int. Cooperation:**

**Decree no. (1) for 2012 to form up Census Office**

## **Decrees of CSO Chairman – Deputy Chairman of Supreme Committee – Census Director:**

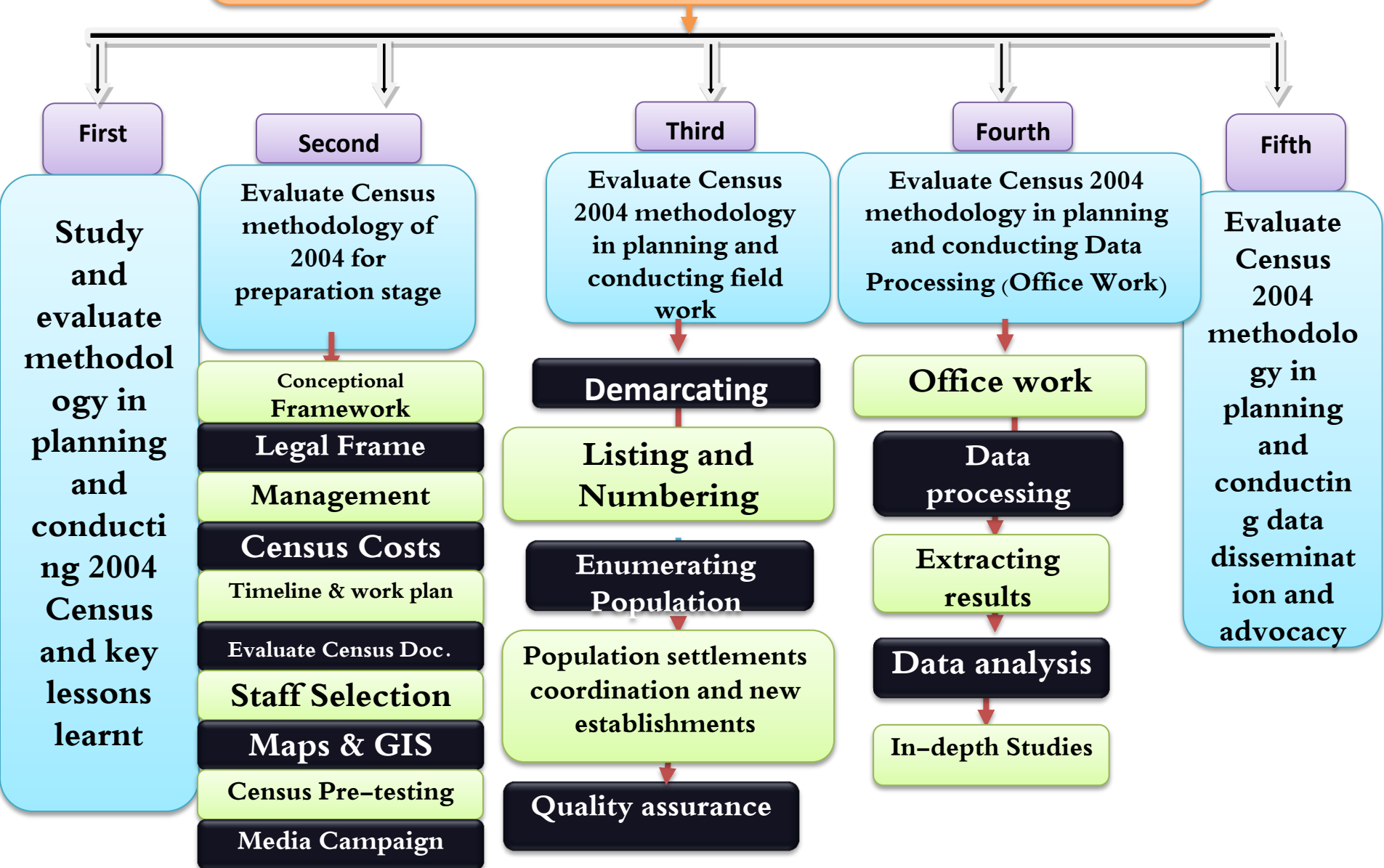
- ❖ Decree no. (19) for 2012 forming Technical working committees (TWG).**
- ❖ Decree no. (20) for 2012 forming technical committee.**
- ❖ Decree no. (21) nominating assistants for census director.**
- ❖ Decree no. (22) for 2012 nominating general coordinator.**
- ❖ Decree no. (23) forming technical working group.**
- ❖ Decree no. (24) for 2012 nominating deputies of director assistants.**

# First Part

**Summary of technical, fiscal and administrative  
evaluation of doc. And methodology of census 2004  
& lessons learnt**



Adm., Technical and Fiscal Evaluation Aspects of Census 2004 Doc.  
Used for Planning Census 2014



# Lessons learnt from Previous Census 2004

Work plan and timeline (to be more comprehensive, clear and transparent / flexibility to accommodate new developments)

Split listing and numbering stage from Enumeration Stage

To create a appropriate time to review, edit and extract frames, maps for enumeration stage

Accommodate results of listing and numbering stage at earlier time and proceed technical, fiscal and adm. For enumeration stage at earlier time

Organize a workshop for ESCWA countries experiences on Census implementation

Using GIS technology for the first time in 2014 Census

Establish networking at HQ and Statistical Offices at Gov.

Using long and short Questionnaires

Design automated program for administrative divisions instead of traditional manual coding.

Utilize modern programs (Oracle) for data processing and extracting results

Produce detailed reports for initial results at governorates level for first time and to lowest units of administrative divisions

Release and publish results of Census electronically

Release results of Census on Maps

Using GPS device to update Maps and produce key services map

Demarcate (key cities/secondary cities/districts centre/large villages 500 HHs and above)

Covering all Yemeni Islands and compose Islands frame and their coordination

# Results of Assessment of Census 2004

## Major remarks of Census 2004 and Proposed Recommendations for Census 2014

Item		Remarks of Census 2004	Proposed recommendations for 2014
1	Planning & Implementation for Fiscal Resources	No breakdown for some activities into budget	Census activities accommodated breakdown of financial resources and also every item in budget
		Some mistakes came up through some supervisors through their fiscal reconciliation	Finance units will be activated at governorates
		Over-estimating some equipments and questionnaires printing for field work	All needs estimated accurately particularly printing documents which will be conducted into two stages

# Assessment Results of Census 2004 and Proposed Recommendations to 2014 Census

Item		Remarks of Census 2004	Proposed recommendations for 2014
2- Documents and Guidelines		* Practicing two questionnaires long and short separately	Taking countries experiences and utilize different stages to prepare Census 2014
			CSO studies potentialities of using modern technologies to entry data
			CSO studies potentialities of using one questionnaire for population enumeration and hence it design accordingly
			CSO will use one questionnaire for enumeration instead of using long and short questionnaires
		* Using two separated records for Establishments, Housing, HHs and Buildings listing	Housing, buildings and HHs listing record have been merged with Establishments
			Occupations manual was updated which was used in Census 2004
Some concerns related to buildings and establishments numbering questionnaire	Field reports of Census 2004 were reviewed and hence concerns will be avoided within field work manual		

## Assessment Results of Census 2004 and Proposed Recommendations to 2014 Census

Item		Remarks of 2004	Proposal for 2014
3	Estimate EAs beside Administrative and Census Divisions	* There are some slight difficulties to determine components of some EAs due to unique geographic condition	Key services map will be utilized through administrative divisions and then to be reflected into Census divisions, utilize population projections to compose EAs at earlier time in addition to satellite images will be used
		* There is an intervention for some administrative divisions components between Gov., districts, sub-districts and etc..	Interventions will be managed through administrative divisions with the cooperation of Ministry of Local Administration
4	Training	* Traditional way was used in training	New ways and approaches will be practiced during field workers training
		* Training wasn't highly achieved particularly during enumeration stage	Training manual would combine related terms and definitions of different office and field work stages

# Assessment Results of Census 2004 and Proposed Recommendations to 2014 Census

Item		Remarks of 2004		Proposal for 2014
5	Data Processing	*	Some manual errors occurred during economic activities coding	<ul style="list-style-type: none"> <li>Automated coding will be activated</li> <li>Consistency and coverage programs will be effectively designed on a high quality control basis</li> </ul>
		*	Some errors occurred during data entry of Listing stage	
		*	Some troubles occurred due to non-coding all occupations	Coding manual will be updated and accommodate all latest developments
6	Enumeration Assessment Results	*	Post-enumeration Survey wasn't implemented in Census 2004	Post-enumeration Survey will be implemented after Census 2014 harmonized with UN recommendations
7	Media Campaign	*	Media campaign didn't cover all stages of Census 2004 particularly rural areas	All required media campaign program would be accommodated and new developments in this regard
8	Dissemination and Publication	*	Final results were delayed due to formalities of discussion, endorsement and passing through series of committees.	Accurate strategy is designed for dissemination and publication which will be restricted to timeline and taking a consultation of data users, beside using modern tools for advocacy and dissemination
		*	No prior discussion with data users on final results and dissemination beside publication of these results	

# Second Part

**Planning Methodology of Census 2014**

# Methodologies of Planning in Census 2014

1- Assessment of methodologies and documents of Census 2004

2- Discuss with partners through workshops and surveying views

3- Design Census document and adopt it

4- Adopt organizational chart

5- Adopt Timeline and work plan

6- Prepare population projections of Census 2014 at administrative and census divisions level

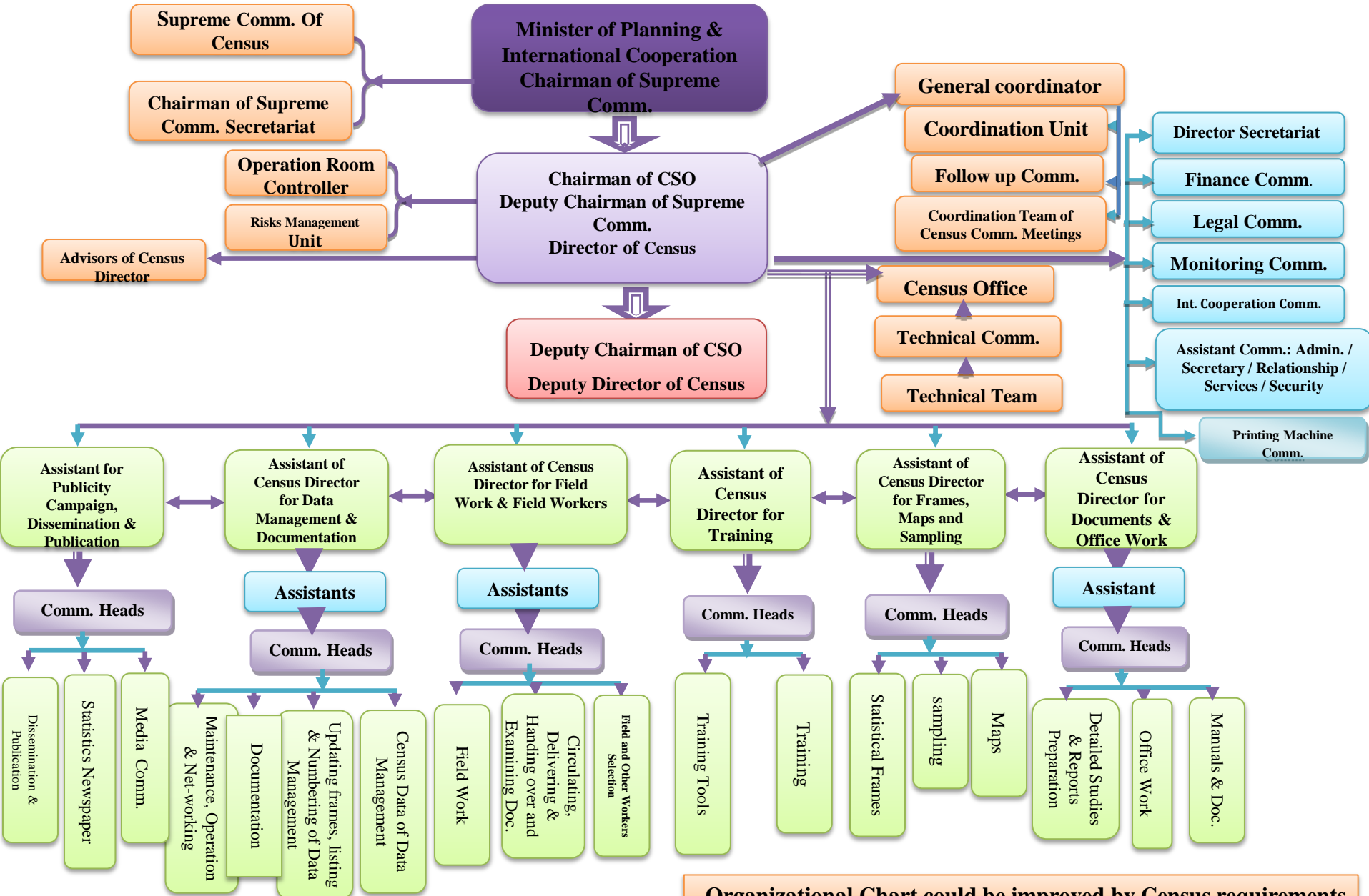
7- Identify fiscal, human, technical needs

8- Set up the general budget

9- Utilize modern technology



# Organizational Chart of Census 2014



Organizational Chart could be improved by Census requirements



## Partnership with UNFPA and Other Agencies:

- The UNFPA is one of CSO major partners through supporting different activities of Census since long time.
- Partnership become more effective during Census 2014 with UNFPA as they cooperated with CSO for preparing Census document and handle tasks of mobilizing resources to Census activities and they are Focal Point with donor community; various meetings organized at earlier time with UNFPA to reach to mutual work program (real partnership) in order to organize workshops aimed to financing gaps.

## •Aspects of partnership between CSO and donor community:

*	Aspect of Partnership	CSO	Donors
*	Planning, managing and monitoring Census (produce Census 2014 document)	- Prepare programs and plans of Census implementation on different financial, technical and administrative tasks and complete organizational and legal requirements and identify needs in thoroughly into budget and work plan	- Review and evaluate financial, technical and human needs and support Census activities
*	Strengthen capacity building of CSO staff		
*	Support Census activities through using modern tools		
*	Support Census activities through databases field		
*	Organize mobilizing workshops to support Census by donor community		
*	Media campaign and data dissemination		
*	Miscellaneous preparations		
*	Technical Consultancy		

## Risk Management Unit of Census 2014

Census management is very keen to follow UNSD recommendations through founding a potential risks management as this is the first time in Yemeni censuses, it will be functioned by studying potential risks politically, economically, socially and natural catastrophes and all other risks.

## Risk Management Unit During Census 2014

- Monitor office and field work and study different issues.
- Implement diverse office work of preparation.
- Conduct two piloting at governorate level.
- Demarcating for secondary and key cities and large villages.
- listing and numbering for housing, buildings, households and establishments.

All mentioned above stages will be before final enumeration stage of population.

# Risk Management Unit During Census 2014

- Forming central operation room on a highest level – also in governorates.
- Forming key committees at governorates chaired by governors and high officials.
- Forming sub-committees at districts chaired by directors of districts and high officials at districts.
- Implement surveys such as HBS/LFS/Economic surveys prior to Census will ensure measuring different issues at this time.
- The supreme/technical committee members will participate effectively during all field work stages.
- Coordinate between CSO and various public institutions to mainstream different capacities to Census activities.
- Various means of transport will be utilized like helicopters to reach to difficult areas such as islands and remote areas.
- Mosques preachers, guidance and awareness centers, local municipalities, seminars and roundtables instructional discussion.

# **Timeline & Work Plan Of Census 2014**

## **Introduction:**

Work Plan of Census 2014 covered all activities required to conduct different stages in the field and office work aimed to achieve planned objectives and determine timeline plan reflected through breakdown program. Work plan considered various technical and financial operations and expressed different activities as a preliminary proposal for any implemented developments on ground, this would help in reviewing continuously work plan and timeline to be updated accordingly.



# Timeline and Work Plan summary of Census 2014

		<u>Activity</u>	<u>Time Period</u>		
			<u>From</u>	<u>To</u>	
1	First: Planning Stage		2012/1/1	2012/6/31	
	1	<u>Prepare Census 2014 Document</u>		2012/1	2012/6
		1	Legal frame of Census 2014	2012/1	2012/6
		2	Conceptional frame of Census 2014	2012/1	2012/6
		3	Methodology and documents assessment of Census 2004 and lessons learnt	2012/1	2012/6
		4	Set up time frame and work plan of Census 2014 (methodology of Census 2014)	2012/1	2012/6
		5	Produce population projections for Census 2014 at adm. And census divisions level	2012/1	2012/6
		6	Estimate work load of Census (EAs / Sections / Sectors) and staff required for Census 2014 (population projections methodology of Census)	2012/1	2012/6
		7	Preliminary estimation of technical fiscal and human needs for Census 2014	2012/1	2012/6
		8	Set up a detailed and breakdown general budget by funding agency and activities	2012/1	2012/6
9	Set up a draft of Census 2014 document	2012/1	2012/6		

# Timeline and Work Plan summary of Census 2014

2	Second: Preparation Stage		1/7/2012	31/3/2014
	1	Complete Census 2004 assessment (analytical)	2012/7	2012/12
	2	Review and finalize project document of Census 2014 and adopt it to be disseminated	2012/7	2012/12
	3	Organizational and management tasks	1/7/2012	31/1/2013
	4	Prepare documents	1/9/2012	31/12/2012
	5	Prepare frames and maps	1/9/2012	14/2/2014
	6	Set up lists of fiscal needs	2012/6/1	2012/12/31
	7	Select staff of office and field work	2012/7/1	2012/12/31
	8	Set up media campaign programs and plan, advocate and mobilize for Census 2014 (first stage)	2012/7/1	2012/12/31
	9	Design preliminary office and automated programs for Census	2012/7/1	2013/1/31
	10	Conduct first piloting (comprehensive)	2013/1/1	2013/6/12
	1	Planning to conduct piloting (minor Census)	2013/1/1	2014/3/31
	1	1 Finalize planning and preparation work	2013/1/1	2013/11/20
	2	2 Implement minor Census (piloting)	21/11/2013	2/1/2014
	3	3 Data processing	27/12/2013	31/3/2014

# Timeline and Work Plan summary of Census 2014

3	Third: Field Work stage		<b>2013/9/1</b>	<b>2015/1/12</b>	
	3-1 Demarcating stage		2013/9/1	<b>2014/2/19</b>	
	1	Finalizing office work	2013/9/1	<b>2013/9/13</b>	
	2	Conduct second media campaign of Census (demarcating stage)	2013/9/1	<b>2013/12/27</b>	
	3	Field work	2013/9/2	<b>2013/12/27</b>	
	4	Office work and data processing	2013/12/9	<b>2014/1/31</b>	
	5	Prepare evaluation report (fiscal and technical)	2014/1/1	<b>2014/2/19</b>	
	3-2 Listing and Numbering Stage		2014/1/15	<b>2015/7/15</b>	
	1	Finalizing office work	2014/1/15	<b>2014/2/23</b>	
	2	Conduct second media campaign of Census (listing and numbering stage)	2013/12/28	<b>2014/6/10</b>	
	3	Field work	2014/2/24	<b>2014/6/4</b>	
	4	Office work and data processing	2014 /6/5	<b>2015/7/31</b>	
	5	Disseminate, advocate and publish Housing and Establishments Census results	2015/3/20	<b>2015/6/15</b>	
	6	Prepare evaluation report (fiscal and technical)	2015/6/16	<b>2015/7/15</b>	
	3-3 Enumeration Stage		2014/8/1	<b>2015/2/28</b>	
	1	Finalizing office work	2014/8/1	<b>2014/10/31</b>	
	2	Conduct third media campaign of Census (Enumeration stage)	2014/9/20	<b>2015/1/31</b>	
	3	Field work	2014/10/19	<b>2015/1/11</b>	
	4	Prepare evaluation report (fiscal and technical)	2015/2/1	<b>2015/2/28</b>	
	3-4 Post-enumeration Survey		2014/8/1	<b>2015/2/17</b>	
	1	Finalizing office work	2014/8/1	<b>2014/12/26</b>	
	2	Training and Field work	2014/12/27	<b>2015/1/14</b>	
	3	Prepare post-enumeration survey findings	2015/1/15	<b>2015/2/17</b>	
	4	Demonstrate preliminary results of Census	2015/1/15	<b>2015/3/15</b>	
	4	Fourth: (Data Processing)		2015/2/11	<b>2016/12/31</b>
		1	Office work and data processing for frames and maps out of enumeration stage results	2015/2/11	<b>2015/8/1</b>
		2	Prepare office work and automated process for enumerating population (data processing	2015/1/1	<b>2015/1/31</b>
		3	1 Office work and automated process for enumeration stage	<b>2015/2/1</b>	<b>2016/12/31</b>

# Timeline and Work Plan summary of Census 2014

5	Fifth: Disseminating and Publishing Census Results (First Phase)		2016 /3 /1	2016 /12 /31
	1	Disseminate and publish Census results	2016/ 3 /1	2017/ 6/ 30
	1	Printing final results of Census	2016/ 3 /1	2016 /7/ 31
	2	Printing in-depth studies	2016/ 10 /1	2017/ 2 /1
	3	Organize mobilized workshops and seminars for Census results	2016/ 4 /1	2016/ 12 /31
	4	Publish and circulate results to data users		
6	Sixth: Update Population Settlements and New Establishments Out of Census Results		2016/ 10 /15	2018/ 1/ 31
	1	Office work	2016/ 10/ 15	2016/ 12 /14
	2	Field work	2016/ 12 /15	2017/ 2 /5
	3	Data Processing	2017/ 1/ 15	2018/ 1/ 31
	4	Produce electronic atlases out of Census results	2017/ 7 /1	2018/ 1/ 31
7	Seventh: Produce In-depth Studies Out of Census Results		2018/ 1 /1	2018/ 4/ 30
	1	Prepare in-depth studies	2018/ 1/ 1	2018/ 3/ 1
	2	Organize mobilized workshops	2018/ 3 /2	2018/ 3 /31
	3	Printing studies and statistical reports	2018/ 4 /1	2018/ 4/ 30
8	Eighth: Fiscal reconciliation, Final fiscal statements and Evaluation Reports		2012/ 10 /1	2018/ 4 /30

# Quality Assurance Procedures of Work Plan and Timeline of Census 2014

**During  
Planning and  
Prior to  
Enumeration  
Stage**

**During  
Enumeration**

**During  
Documents  
Flow**

**During  
Coding and  
Data  
processing**

**During Data  
correction**

**During Results  
Dissemination**

## Quality Assurance Mechanisms:

Technical, fiscal and adm. Program was set up to improve data of Census as represented in the following table:

<b>S</b>	<b>Stage</b>	<b>Technical, Fiscal and Adm. Controls</b>
<b>1</b>	<b>Planning Stage</b>	1 Re-assure of quality control followed during Census 204 and lessons learnt in planning
		2 Prior identification of work load of all stages
		3 Prior identification of timeline of implementation
		4 Prior determination of staff number and supporting tools
		5 Prior determination of staff remuneration during field and office work
		6 Prior determination to include contingencies to encounter any unexpected development
		7 Flexibility in designing budgets and plans to accommodate any development
		8 Set up financial and technical forms and documents beside lists of staff names and disbursement timing
		9 Set up appropriate instructions to conduct financial and technical procedures of office and field work
		10 Elaborate and activate monitoring and supervision of field work (tech. and fin.) at different stages
		11 Establish finance units at Gov. to mainstream Census procedures
		12 Central financial reconciliation of finance and at Gov.
		13 Interim follow up and evaluation
		14 Prior determination of field and office comm. tasks and duties beside standards and conditions staff selection
		15 Accounting on piloting results to specify best ways for later stages

## Quality Assurance Mechanisms:

S	Stage	Technical, Fiscal and Adm. Controls		
2	Prior to Enumeration Stage	1	Prepare frames, EAs maps, lists of HHs and work load	
		2	Set up criteria for staff selection, train them, carrying out tests for final selection	
		3	Technical and field supervision	
		4	Split over all stages and take advantages of each stage to implement later one	
3	Enumeration Stage	1	Monitor field operations and assess field workers consecutively	
		2	Field visits	Interview household
			Evaluate performance of field workers	
		3	Form up central operation control room at HQ and at Gov. and assign technical team to respond to all enquiries received from field	
		4	Prepare progress reports of office and field work including financial and technical issues	
		5	Draw samples of enumeration questionnaires to reviewed and assessed	
		6	Central verification and review	
7	Prepare technical and financial reconciliation at Gov. level and HQ			

# Quality Assurance Mechanisms:

<b>S Stage</b>		<b>Technical, Fiscal and Adm. Controls</b>	
4	After Enumeration Stage	1	Technical review for documents based on adopted consistency standards
		2	Prior evaluation for performance
		3	Set up rules for manual and computerized review and coding
		4	Set up consistency rules and verify contents and coverage
		5	Computerized coding for economic activity
		6	Computerized and manual data editing and correcting
		7	Assess staff performance and count mistakes, then take necessary action consequently
		8	Design accounting systems to conduct finance operations
		9	Determine specific system to circulate, preserve, flow and recall documents during different parts of Census
		10	Prior determination of computerized and office work load at adm. Divisions level
		11	Assessment reports of achievement progress
		12	Compare preliminary results of Census with listing results, beside population estimation with previous Census to recognize conformity level of statistical indicators
		13	Conduct Surveys after Enumeration Stage



## **Produce Maps for Census 2014**

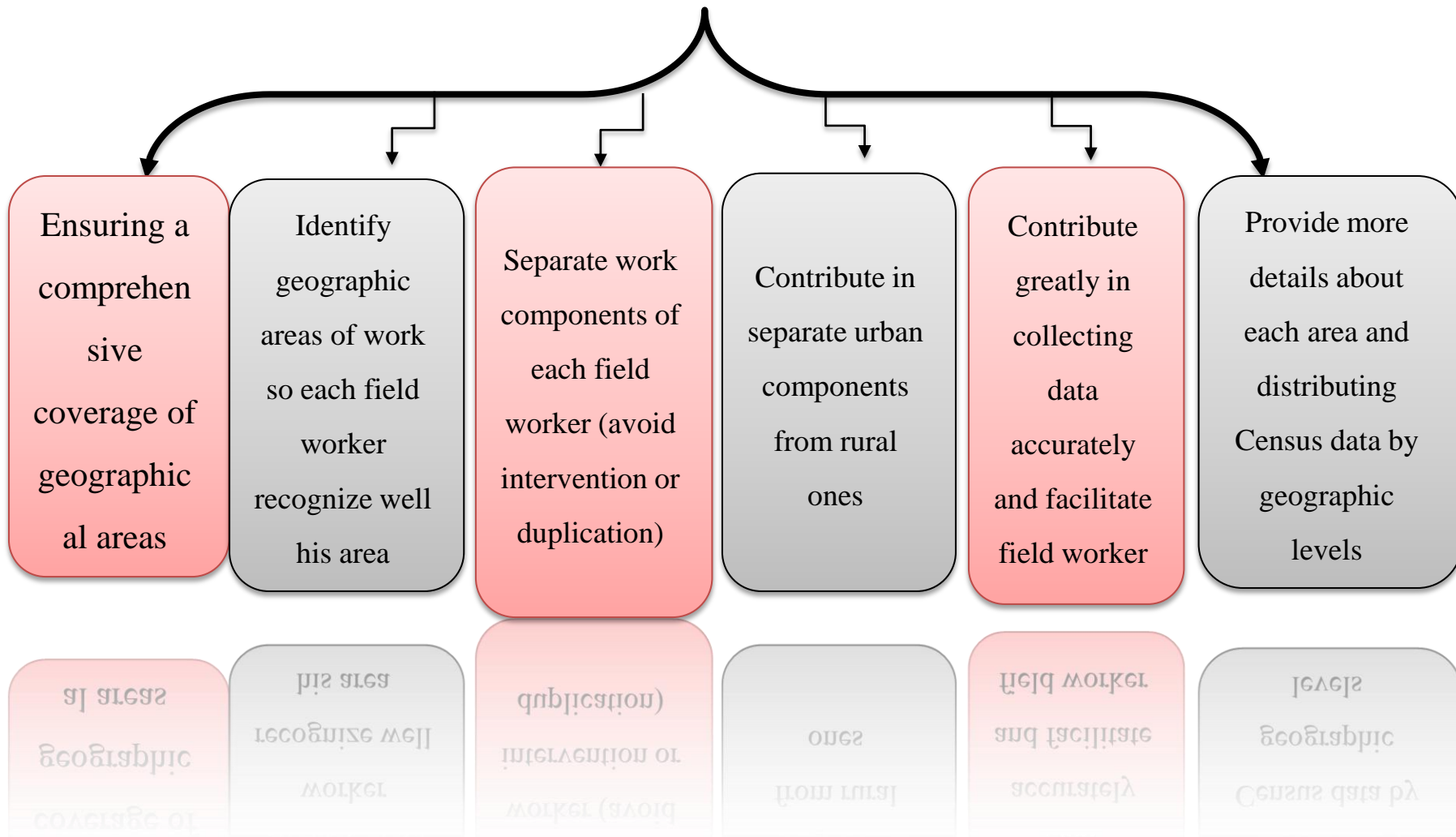
CSO will account on a comprehensive satellite images covering the whole country for the first time to assure quality of Census implementation while making Census divisions at urban and rural; networking connection achieved between CSO and Remote Sensor Center which will provide satellite images of the Republic of Yemen on which that will produce a high quality and accuracy of maps for Census divisions, which will ensure good planning through the adopted timeline beside its impact to estimate costs rightfully for Census activities.

## **Produce Maps for Census 2014**

Utilize GIS technology progress which used during 2004 and will be used during Census 2014 through following steps:

- ✓ Rehabilitate and update infrastructure of GIS and updated versions of concerned programs (version 10)
- ✓ Train concerned cadre at modern programs and databases management beside spatial analysis
- ✓ Use satellite images / digital map from the Remote Censor Center
- ✓ Update frames and combining them within databases
- ✓ Divide Enumeration Areas
- ✓ Expose results on Maps

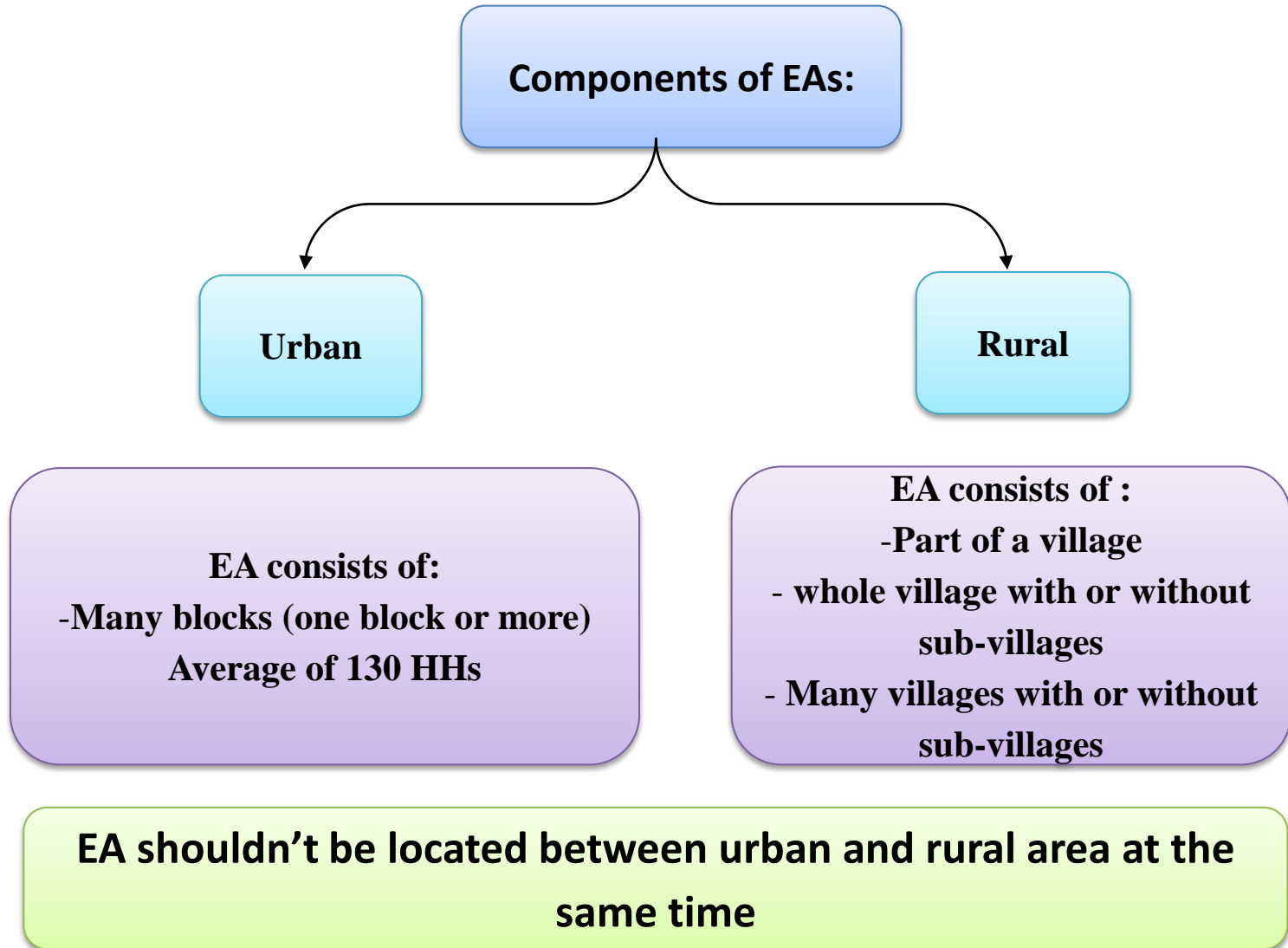
# Importance and Role of Maps in General Represent In



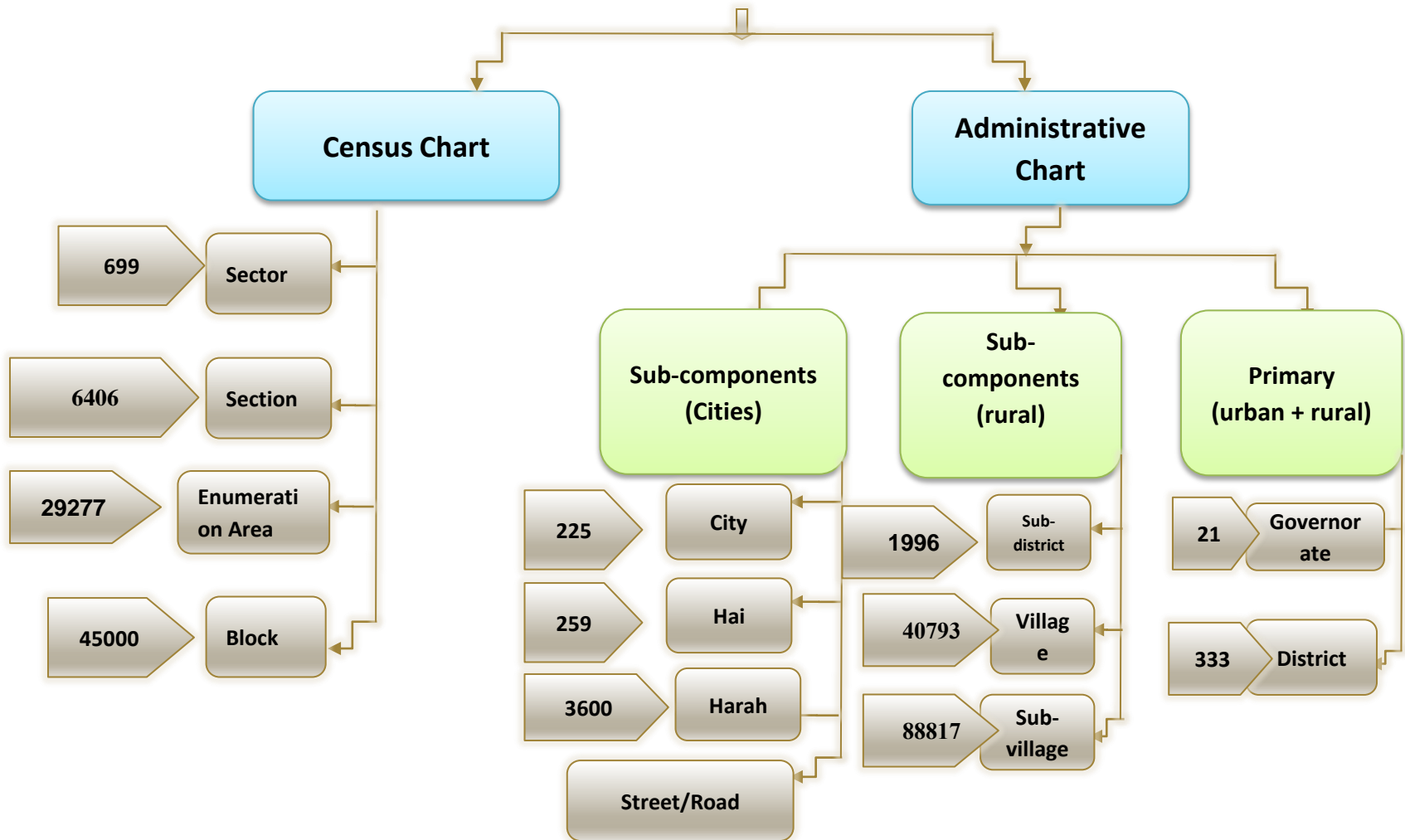
## •Division of EAs Through Using GIS

Methodology		Remarks
1	Maintain outstanding adm. divisions	<ul style="list-style-type: none"> <li>▪ Division according to population projection</li> <li>▪ Review EAs through listing and numbering stage results</li> </ul>
2	Division will be based on (HHs no. and area size)	
3	Independency – no intervention	
4	Coverage – all country	
5	Identify boundaries and components of EAs (facilitate recognizing on ground)	
6	Convenience of EAs size to ensure better implementation of work and quality assurance	
7	Compatibility with previous Censuses for comparison	

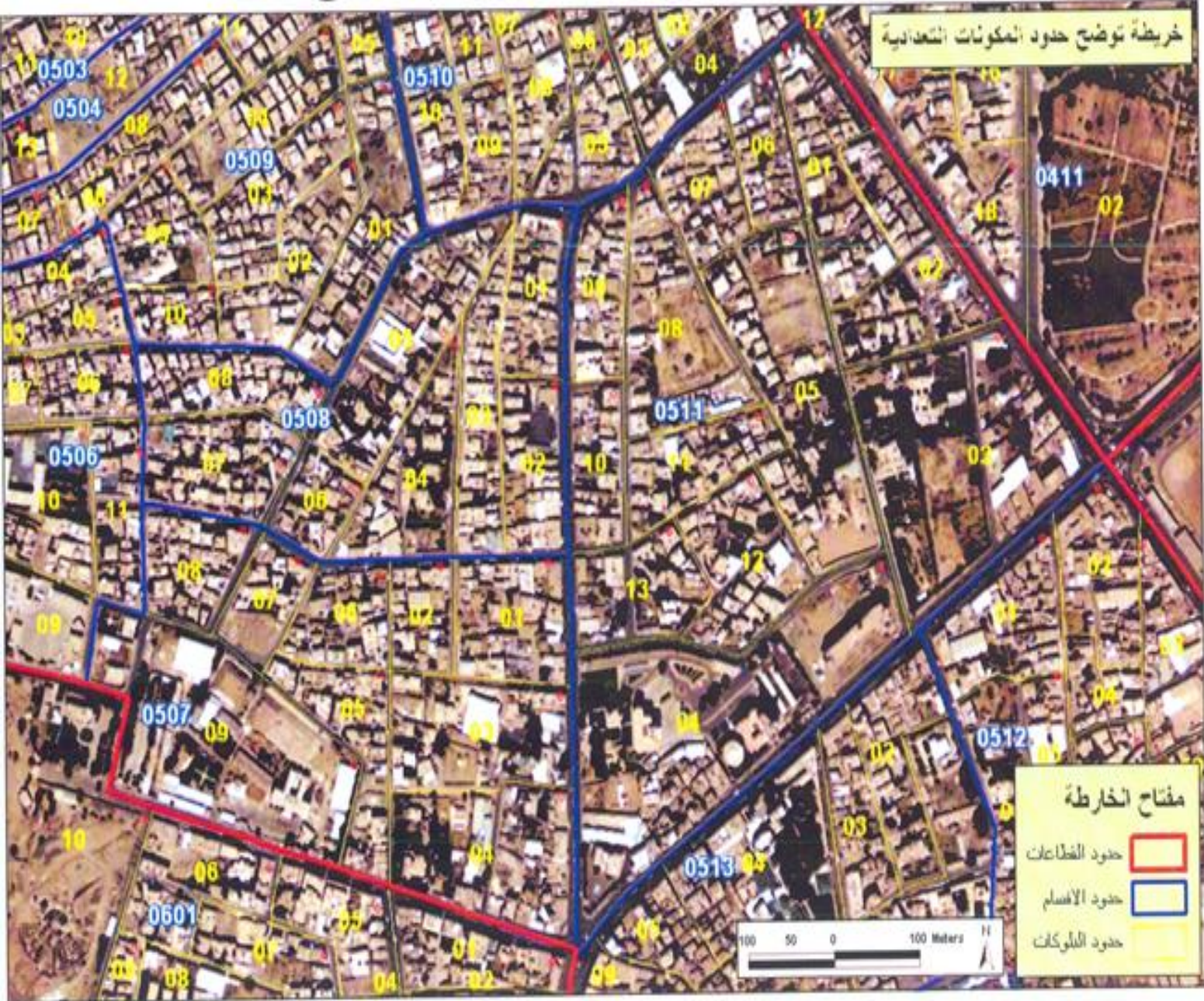
# EAs Components:



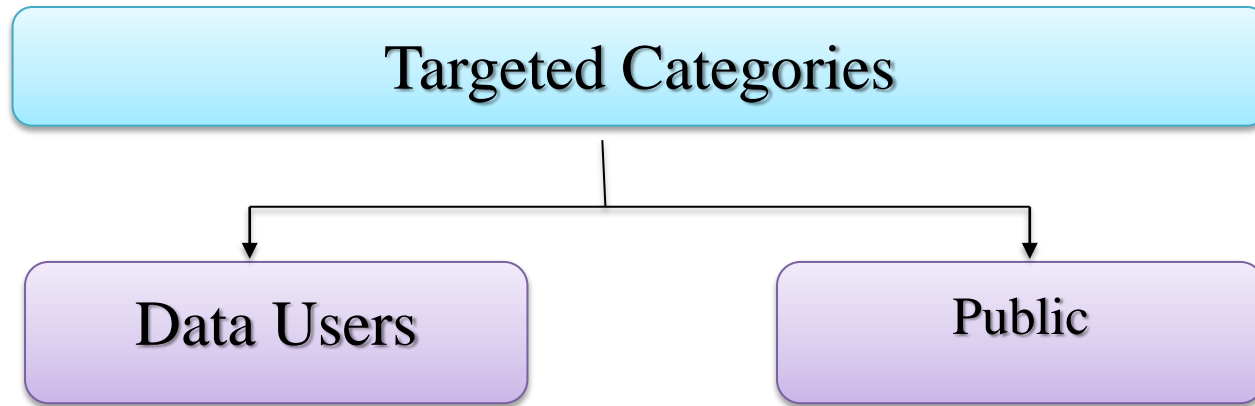
# Administrative and Census Chart in the Republic of Yemen



•Maps :  
Satellite Map



# Media Campaign:



**Through a concrete awareness campaign on census importance and objectives and to ensure every body collaboration and objective programs which lead to successful media campaign through:**  
**increase awareness of general concept of census**  
**benefits which will bring back to individual and society**  
**enhance trust between people and public institutions**

- ✓ Integrated strategy of media campaign set up through different field stages and office work to enhance awareness of individual which lead to a successful achievement.

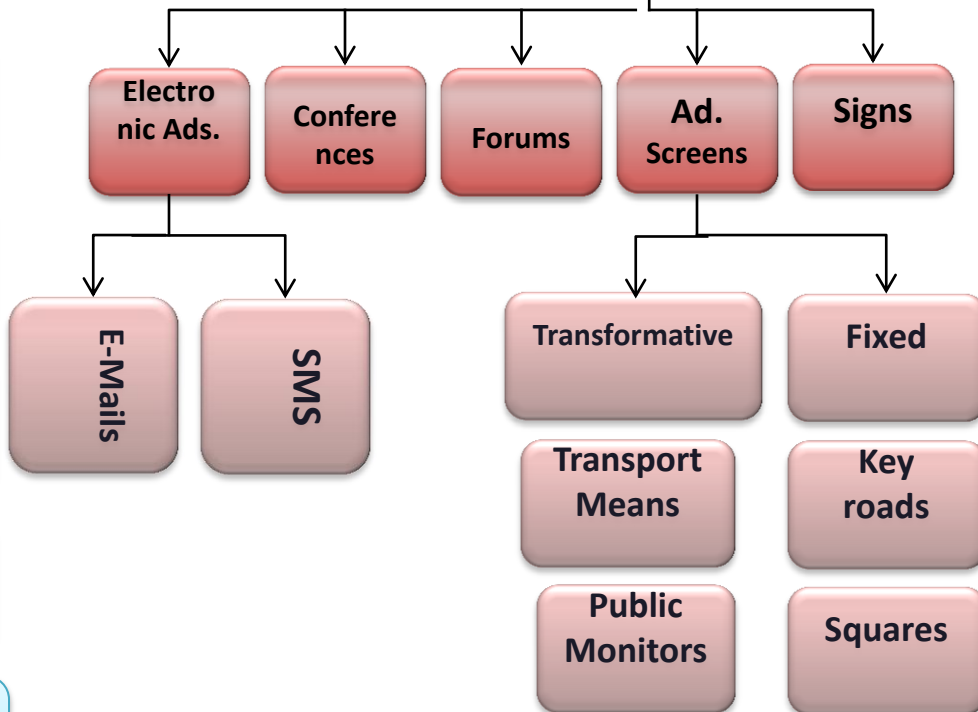


# Media Campaign Trends

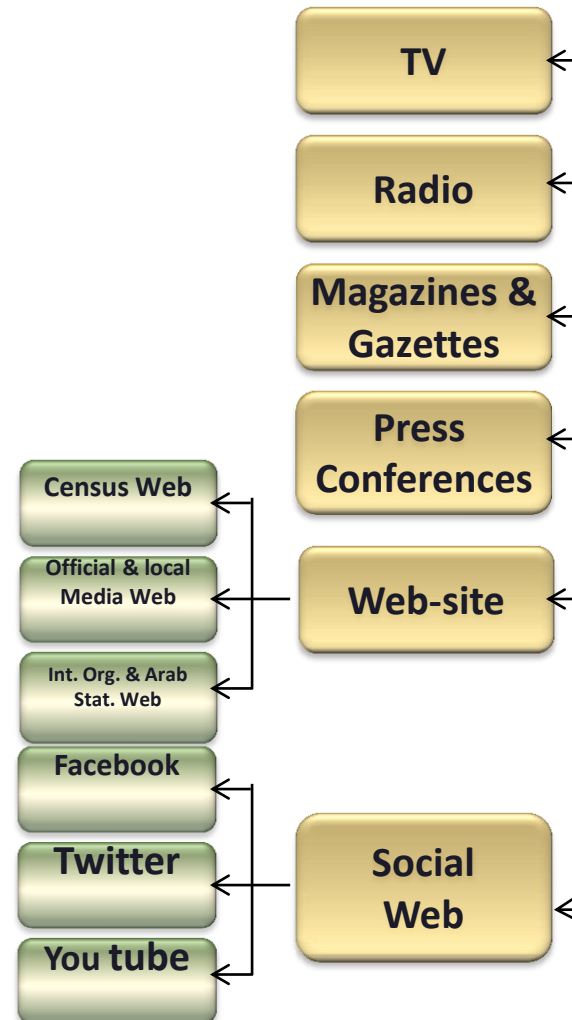
## Tools of Public Relationship Campaign

- Introductory Booklet
- Gifts
- Field Visits
- Public Calls
- School Students

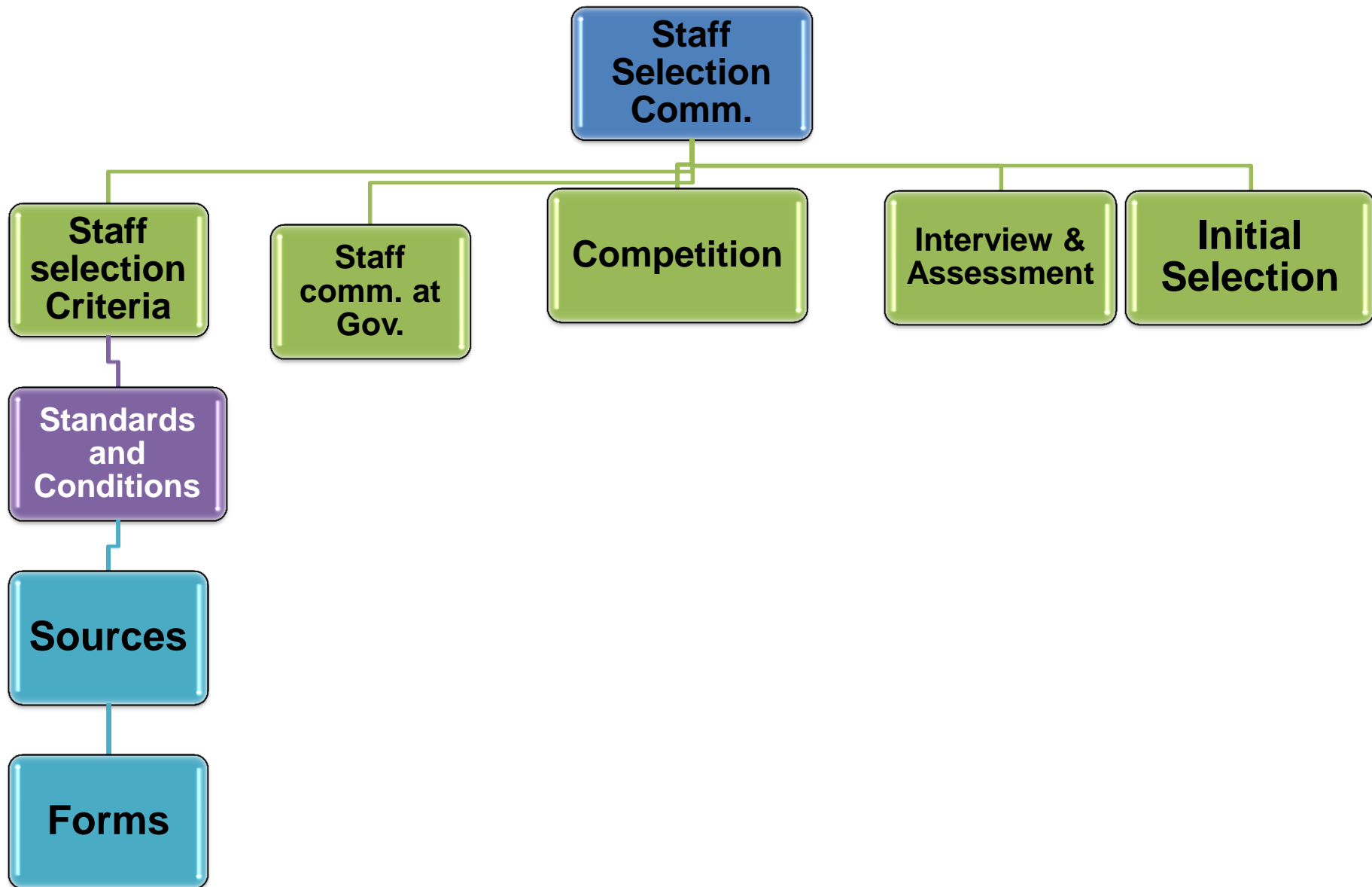
## Tools of Awareness Campaign



## Tools of Media Campaign



# Staff Selection:



# Matrix of Stat-Cap Census 2014

Internal Training		Abroad Training	
1	GIS training	1	Application of electronic publication
2	Modern methods and approaches for Census implementation	2	Using (oracle) databases and programs and Scanning device
3	Using updated programs and versions	3	Data assessment and manage odd values
4	Quality assurance and control of data	4	Data analysis
5	Databases and using modern technologies	5	Geographic data analysis
6	Data assessment	6	GIS
7	Data analysis	7	Sampling methods
8	Sampling	8	Follow up and monitor field work and quality control at Statistical Units
9	Data collection	9	Establish communication networking
10	Design interactive show programs for indicators monitored on maps and diagrams	10	Practice Oracle Application
11	English language	11	Design Atlases and Interactive Maps
12	MS Applications	12	Data security and reserve

<b>1</b>	<b>S</b>	<b>Activity</b>	
	<b>1</b>	<b>Technical Support</b>	
		<b>1</b>	Using modern technologies in Censuses
		<b>2</b>	Review and update Census questionnaires
		<b>3</b>	Data assessment and Post-enumeration survey
		<b>4</b>	Data analysis
		<b>5</b>	Odd values, controls and quality assurance
		<b>6</b>	Data publication and use

### Study Visits

<b>1</b>	Gulf Countries
<b>2</b>	Moroccan Countries
<b>3</b>	Egypt
<b>4</b>	Jordan
<b>5</b>	Foreign Countries

# Census Pre-testing

```
graph TD; A[Census Pre-testing] --> B[First Piloting]; A --> C[Minor Census (Second Piloting)]; B --> D[Testing all stages and tools]; C --> E[Testing enumeration stage methods and tools]; D --> F[4-6/2013]; E --> G[12/2013]
```

The diagram is a flowchart titled "Census Pre-testing". It branches into two main paths. The left path, highlighted in grey, starts with "First Piloting", followed by "Testing all stages and tools", and ends with the date "4-6/2013". The right path, highlighted in orange, starts with "Minor Census (Second Piloting)", followed by "Testing enumeration stage methods and tools", and ends with the date "12/2013".

First Piloting

Testing all stages  
and tools

4-6/2013

Minor Census  
(Second Piloting)

Testing enumeration  
stage methods and tools

12/2013

# Field Operations

# Field Operations

## 1- DEMARCATING STAGE

**Determine timeline**

**Determine Staff groups**

**Determine practiced tools**

**Select and train staff**

**Determine targeted areas**

**Demarcating Cities**

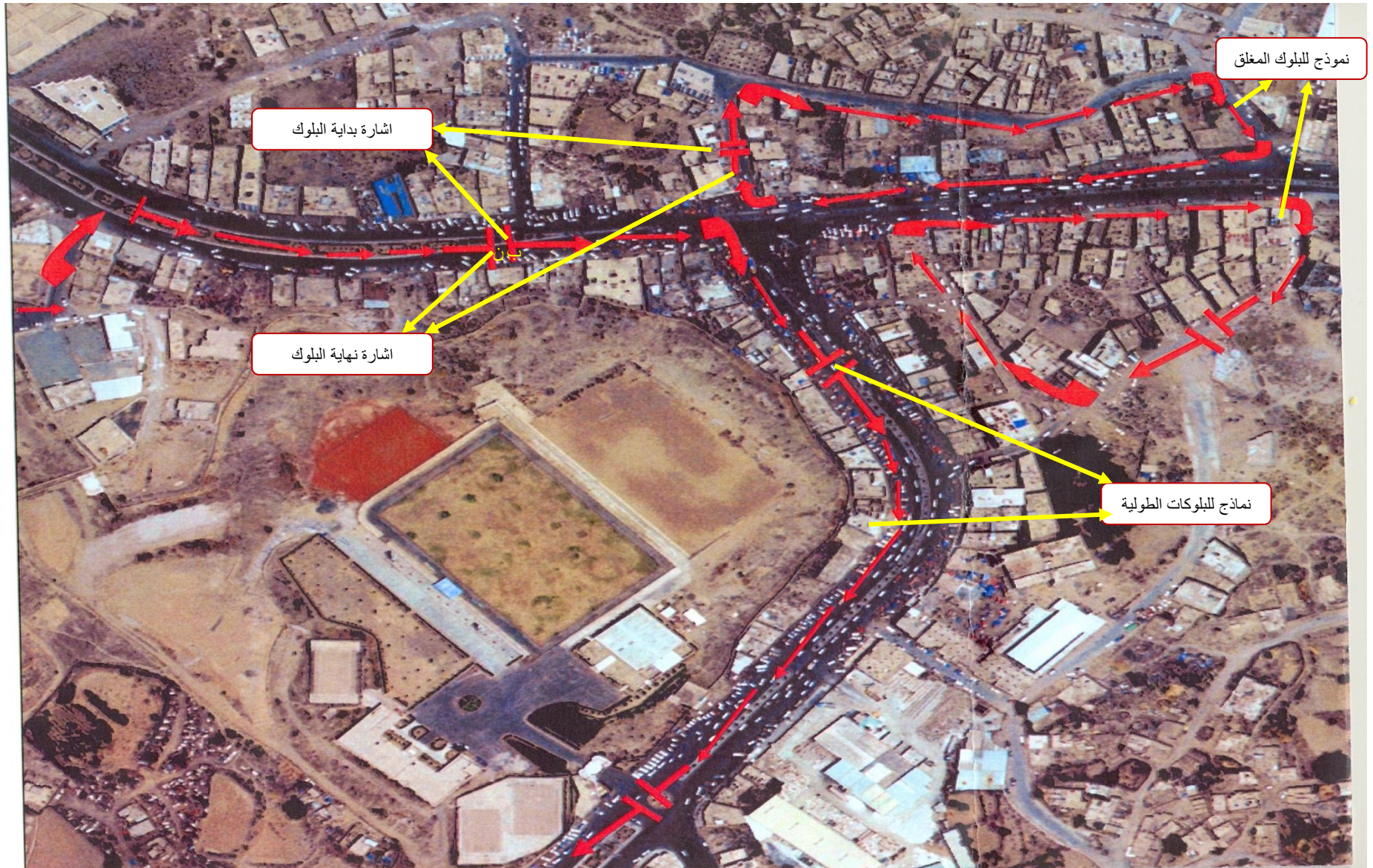
Sectors and sections demarcating

**Blocks demarcating**

**Extracting results**

# Field Operations

## 1- DEMARCATING STAGE





# Field Operations

## 2- Housing, Establishments, Buildings and Households Listing & Numbering

**Determine timeline**

**Determine Staff groups**

**Determine practiced tools**

**Select and train staff**

**Coverage of targeted areas**

**Establishments and buildings numbering**

**Housing, establishments, buildings and households listing**

**Fiscal reconciliation of stage**

**Prepare frames and maps for enumeration stage**

**This table shows Census work load at Gov. level (actual 2004 – estimation Census 2014)**

S	Gov.	Work load				Districts	Census Divisions							
		Population in (thousands)		Households No.			Sectors No.		Sections No.		EAs No.		Blocks No.	
		2004	2014	2004	2014		2004	2014	2004	2014	2004	2014	2004	2014
1	Ibb	2132	2685	305252	409,251	20	59	74	583	729	2425	3,172	23358	45000
2	Abyan	434	539	58833	78,842	11	14	18	104	131	462	633		
3	Sana'a City	1748	2851	254866	339,260	10	45	52	477	554	1678	2,756		
4	Al-Baida	577	721	67572	90,577	20	13	16	130	162	532	753		
5	Taiz	2393	3013	367732	492,883	23	68	86	669	850	2906	3,792		
6	Al-Jawf	444	557	59028	79,159	12	8	11	92	129	356	610		
7	Hajja	1480	1979	194972	261,398	31	37	46	367	453	1635	2,084		
8	Al-Hodeidah	2157	2945	349309	467,980	26	66	86	622	812	2676	3,892		
9	Hadhramout	1029	1380	124809	167,007	30	31	33	280	300	972	1,375		
10	Dhamar	1330	1777	187765	251,760	12	42	54	349	448	1598	1,941		
11	Shabwah	470	598	53065	71,044	17	17	18	122	129	473	564		
12	Sa'ada	695	985	85477	114,473	15	20	25	160	197	697	883		
13	Sana'a gov.	919	1106	117452	157,501	16	30	35	237	277	942	1,240		
14	Aden	589	843	90667	121,284	8	17	20	170	199	633	967		
15	Lahj	723	926	105013	140,662	15	21	26	199	248	822	1,104		
16	Mareb	238	308	28028	37,555	14	9	12	52	69	237	308		
17	Al-Mahweet	495	649	69113	92,652	9	14	17	127	151	566	720		
18	Al-Mahra	89	134	13933	18,675	9	6	7	36	40	116	159		
19	Amran	878	1023	106732	142,982	20	27	32	215	255	905	1,120		
20	Al-Dhale	471	660	59894	80,275	9	13	16	115	141	471	619		
21	Raima	394	526	56321	75,518	6	13	15	116	132	485	585		
Total of Republic		19,685	26,205	2,755,833	3,690,738	333	570	699	5,222	6,406	21,587	29,277		

# Field Operations

## 3- Enumeration Stage

**Determine timeline**

**Determine Staff groups**

**Determine practiced tools**

**Select and train staff**

**Review and update field frame**

**Counting population and housing**

**Handing over and recalling back  
documents from field teams**

**Review and edit questionnaires**

**Financial reconciliation**

# Post-enumeration Survey:

## **Definition**

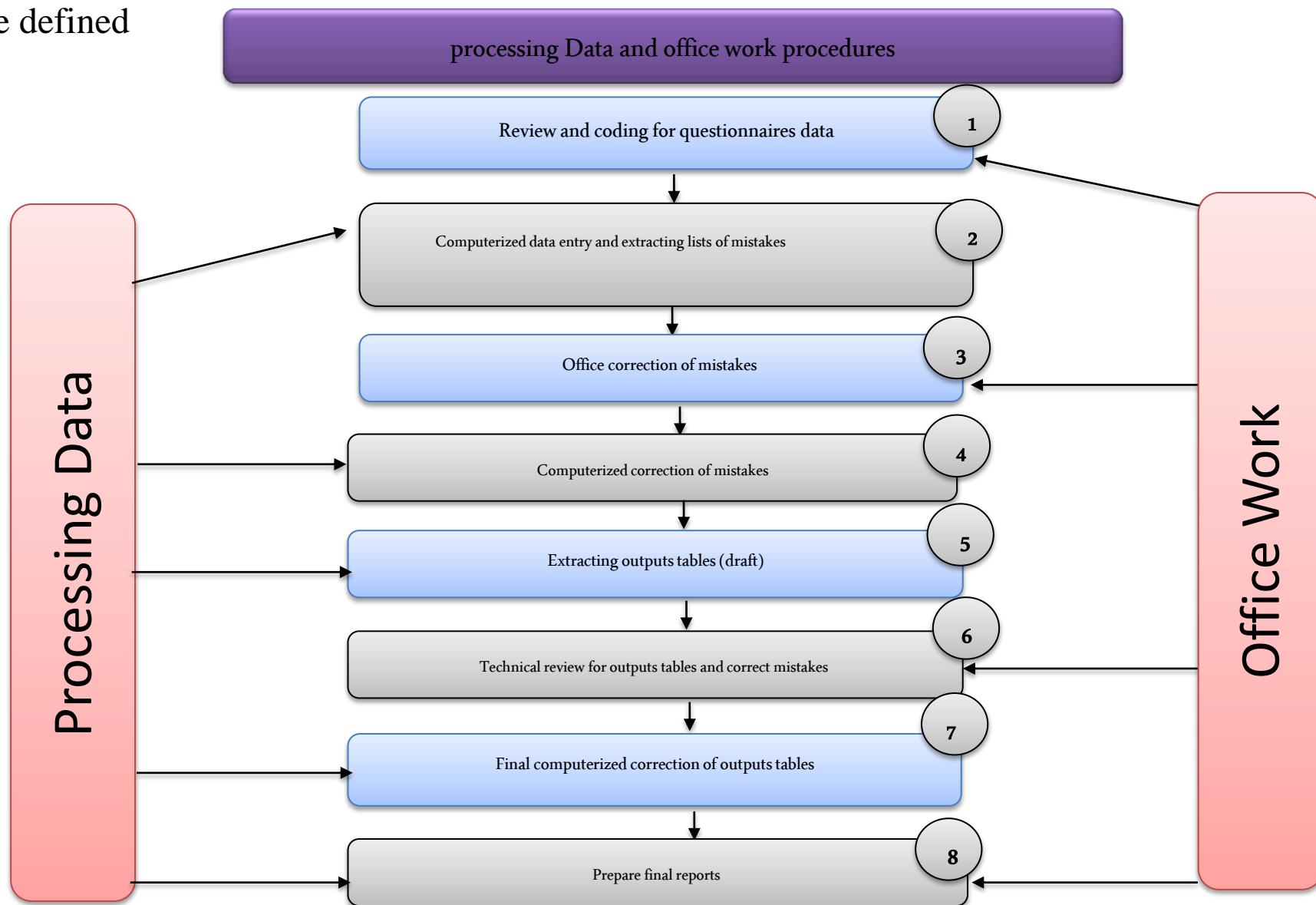
It is a field study conducting a random sampling of selected EAs after short time of Census implementation.

Post-enumeration survey is the sole and trustworthy way to measure a coverage level of HHs and individuals through demographic characteristics and overall the country, and also measuring contents errors for some demographic characteristics

Extracting Preliminary Results of Census 2014

# Processing Data Stage

Census 2014 is still in the planning stage now and based on the pre-testing, methodology will be defined



# Proposed modern tools to implement Census 2014

## Methodologies and Planning

Merge listing questionnaires of housing, buildings and households with establishments questionnaire into one questionnaire

Merge long and short questionnaire into one record taking advantages of other States experiences

Conduct two piloting to experience various ways and tools for actual implementation

Set up earlier strategy concerning dissemination and publication of Census data with a consultation of data users

Found Risks Management Unit

**Modern  
Tools and  
Technologies**

**S**

**GIS used during 2004 and planned to use GIS (ARC GIS.10) beside digital images for planning and field tasks and for Census 2014 data show**

**Using Scanning device for questionnaires data entry during conduct a piloting in both traditional and modern ways**

**Computerized coding for economic activities based on ISIC manual**

# Capacity Building

**Rehabilitate GIS staff for using modern systems**

**Databases management and uses of modern tools and technologies**

**Data analysis, evaluation and instant applications**

**Data dissemination and media campaign**



# Cost Estimate Summary of Census 2014

## Census 2014 Costs

### Census 2014 Costs Aspects

- 1- Previous costs and current values.
- 2- Population Growth
- 3- Costs of Managing some concerns of previous Censuses
- 4- Costs of similar projects implementation at CSO or other entities
- 5- Using modern tools and technologies
- 6- Assessment of previous situation and current infrastructure.
- 7- Logistical support
- 8- Economic Changes
- 9- Latest developments of States experiences.
- 10- Typical periods for planning and implementation of all stages

## Table shows Comparison between 2004 & 2014 Censuses

Item		Actual 2004	Estimation 2014	
1	Work Load			
	1	Population Size	19,685,161	<b>26,204,000</b>
	2	HHs No.	2,755,833	<b>3,690,738</b>
	3	Housing and Buildings No.	2,834,437	<b>3,712,346</b>
	4	Establishments No.	587,310	<b>979,860</b>
	5	Population Settlements No.	132,000	<b>133,000</b>
	6	Blocks No.	23,358	<b>45,000</b>
	7	EAs No.	21,587	<b>29,277</b>
	8	Sections No.	5,222	<b>6,406</b>
	9	Sectors No.	570	<b>699</b>
2	Staff No. BY their Groups			
	1	Supervisor	22	<b>22</b>
	2	Supervisor assistant	44	<b>50</b>
	3	Assistant	647	<b>724</b>
	4	Registrar / Team leader	5016	<b>6500</b>
	5	Enumerator / Interviewer	21653	<b>29500</b>
	6	Reserve	2984	<b>1920</b>

## Total Cost Estimate:

Total of cost estimate of Census during 2012-2018 is about 14.305.349.735 Y.R (local currency) equal to USD \$ 66.536.510 supported through local and foreign contribution.

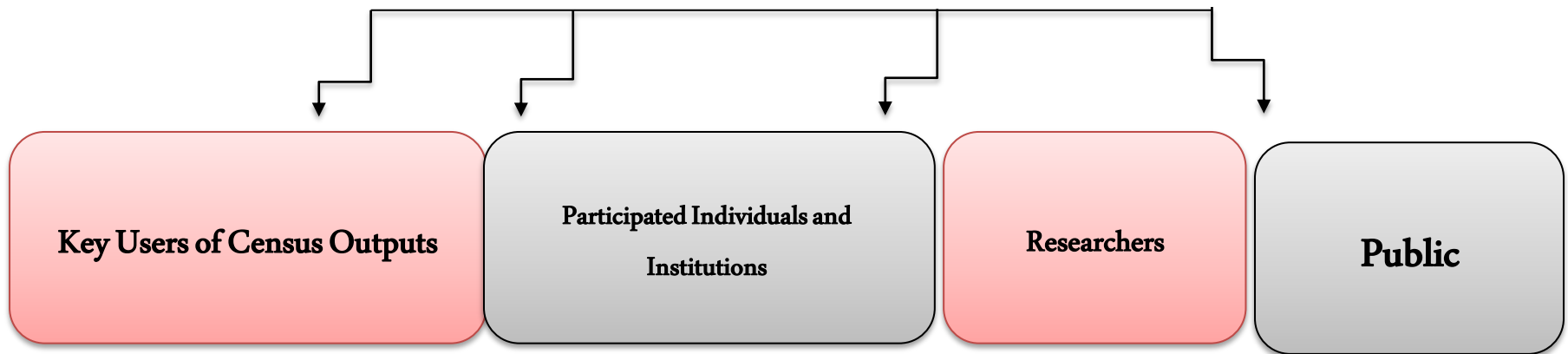
- **Gov. share of 12.413.273.960 Y.R equal to USD \$ 57.736.158 as of 78% out of total budget.**
- **Foreign share of 1.892.075.775 Y.R equal to USD \$ 8.800.352 as of 13% out of total budget of Census.**
- **Cost average of HHs amounts of USD \$18 equals to 3870 Y.R.**
- **Cost average of individual amounts of USD \$2.5 equals to 538 Y.R.**
- **Average in the world costs at USD \$4.60 per individual.**
- **The UNFPA contributed in preparing some activities of Planning stage during 2012.**
- **The following is a summary of budget:**

## Expected Funding Contribution of Census 2014 by Funding Agency:

Activity		Funding Agency		
		Local	Foreign	Share
1	Central management of Census remuneration	7093390	0	10.7
2	Training remuneration	6319453	0	9.5
3	Field work allowances	36862468	0	55.4
4	Office work allowances	2102658	0	3.2
5	Data processing allowances	2391147	0	3.6
6	Planning and implementation remuneration for providing fiscal needs and reconciliation	156071.2	0	0.2
7	Media campaign	0	1358781	2.0
8	Printings, appliances and tools	2077807	0	3.1
9	Raise capacity building	0	1503721	2.3
10	Workshops, seminars and dissemination	0	451726.9	0.7
11	Equipment and materials	0	5032356	7.6
12	Produce intellectual, and qualitative materials	0	123255.8	0.2
13	Prepare studies	0	206976.7	0.3
14	Manage interventions between population settlements at governorates and boundaries interventions	0	73538.88	0.1
15	Prepare Census document through agreement with UNFPA and equip the Coordination Unit of Census 2014	0	50000	0.1
16	Other operational Costs (maintenance, spare parts/fuel/electricity/repair/etc...)	733163	0	1.1
<b>Total</b>		About (USD \$66536510)		100
<b>Share</b>		%87	%13	

# Dissemination and Publication of Census 2014 Data:

- ✓ To ensure investing Census results into analysis, in-depth studies comm. formed for the first time at CSO aimed at producing analytical studies of Census data, a proposal of twenty eight subjects of statistical studies submitted and will include major parts of outputs.
- ✓ A proposal of data dissemination and publication strategy submitted for facilitating availability of Census data smoothly and timely to all data users.



# Reports, Final and Preliminary Results of Census 2014

Activity		Outputs	Timeline			Ways of Dissemination
			Adoption	Release	Publish	
1	Final results of buildings, housing and HHs listing (buildings Census)	Key report at the Republic level	Oct. 2014 – Mar. 2015	May. – June 2015	June 2015	Hard Copy + Soft Copy + CSO Website
2	Final results of establishments listing (establishments census)	Key report at the Republic level ❖ Detailed frame of establishments at Gov.	Oct. 2014 – Mar. 2015	May. – June 2015	June 2015	Hard Copy + Soft Copy + CSO Website
3	Report of preliminary results at administrative divisions level	❖ Report of preliminary results at the Republic level ❖ Report of preliminary results at Gov. level	Jan. – Feb. 2015	Feb. – Mar. 2015	Mar. 2015	Hard Copy + Soft Copy + CSO Website
4	First key report of Census 2014	❖ Report of first key report of Census 2014 at adm. Divisions level, Republic Total ❖ First key report at Gov level	Nov. – Dec. 2015	Jan. – Feb. 2016	Mar. 2016	Hard Copy + Soft Copy + CSO Website
5	Second key report on demography characteristics	❖ Second report on demographic characteristics at Republic level	Dec. 2015 – Jan. 2016	Feb. – Mar. 2016	Apr. 2016	Hard Copy + Soft Copy + CSO Website
6	Third report Economic characteristics	❖ Third report of Census on economic characteristics at Republic level (sample)	Mar. – Apr. 2016	May – June 2016	July 2016	Hard Copy + Soft Copy + CSO Website

# In-depth Studies:

Proposed Study		Timeline		
		2014-2015	2016	2018
1	Establishments characteristics	Oct. 2014 – Mar. 2015		
2	Buildings characteristics	Oct. 2014 – Mar. 2015		
3	Housing characteristics		July – Dec. 2016	
4	Households characteristics		July – Dec. 2016	
5	Economic characteristics of population		July – Dec. 2016	
6	Analytical study on educational characteristics		July – Dec. 2016	
7	Durable goods and commodities		July – Dec. 2016	
8	IT and telecommunication		July – Dec. 2016	
9	Analytical study on power		July – Dec. 2016	
10	Analytical study on Yemen situation of water		July – Dec. 2016	
11	Key estimation on poverty map through poor population characteristics at Gov./districts level and urban and rural level		July – Dec. 2016	
12	Population projections at Republic / Gov. / districts level		July – Dec. 2016	

# In-depth Studies:

Proposed Study		Timeline		
		2014-2015	2016	2018
<b>13</b>	Assessment of age–sex distribution data		July – Dec. 2016	
<b>14</b>	Expectation of economic and social future situation in Yemen		July – Dec. 2016	
<b>15</b>	Marginalized groups characteristics		July – Dec. 2016	
<b>16</b>	Fertility in Yemen (patterns and trends)			Jan. – Apr. 2018
<b>17</b>	Adults mortality and life tables composition			Jan. – Apr. 2018
<b>18</b>	Mortality trends in Yemen			Jan. – Apr. 2018
<b>19</b>	Baby breast–feeding mortality			Jan. – Apr. 2018
<b>20</b>	Maternal mortality			Jan. – Apr. 2018
<b>21</b>	Environmental characteristics at Republic of Yemen based on population activities and uses			Jan. – Apr. 2018
<b>22</b>	Internal migration in Yemen			Jan. – Apr. 2018
<b>23</b>	Urbanization and cities growth in Yemen			Jan. – Apr. 2018
<b>24</b>	Key Cities in Yemen (40 City)			Jan. – Apr. 2018
<b>25</b>	Yemeni Islands			Jan. – Apr. 2018
<b>26</b>	Nomads in Yemen			Jan. – Apr. 2018
<b>27</b>	Child labor in Yemen			Jan. – Apr. 2018
<b>28</b>	Unemployment trends in Yemen			Jan. – Apr. 2018



## Qualitative Reports:

### Electronic Atlases & Maps:

- ✓ **Link Census data to maps and geographic database gradually during 2016-2018**
- ✓ **Produce electronic atlases at the Republic and Gov. during 2016-2018**
- ✓ **Key maps (administrative divisions) during 2016-2017-2018**

# Workshops and Seminars:

-	<b>Central - HQ</b>	<b>Planned</b>
<b>1</b>	Workshop on Census objectives and importance	2013
<b>2</b>	Workshop on Countries Practices in Censuses (2010 Round)	2013
<b>3</b>	Workshop on Private sector Role	2013
<b>4</b>	Workshop on the Role of Governmental Institutions for making Census Successful	2013
<b>5</b>	Workshop on activating Media role to introduce Census Importance and Awareness	2013
<b>6</b>	Workshop on Women Role in Census	2013
<b>7</b>	National Conference to launch Census Work	2014
<b>8</b>	Workshop on Mobilizing Resources With Support of Donor	2013
<b>9</b>	Announcement of Preliminary Results	2015
<b>10</b>	Workshop for Disseminating Census Results	2015-2016
<b>11</b>	Workshop on Census Results Aimed to Prepare Social, Economic and Demographic Studies	2015-2016
-	<b>Governorates</b>	
<b>1</b>	Workshop on Local Municipalities Role in Census	2014
<b>2</b>	Planning Committee to disseminate Census 2014 Results	2015-2016

**Thank you**