

**SOME INEVITABLES FOR  
SUCCESSFUL GROUNDWATER  
CONSERVATION AND  
MANAGEMENT**

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DEVELOPMENT CENTRE FOR  
ALTERNATIVE POLICIES

**OVERALL REQUIREMENT – OVERALL  
INEVITABLE- PARADIGM SHIFT ON WATER / NR**

- **ARE HUMANS GUIDING THE NATURAL ENVIRONMENT OR DOES THE NATURAL ENVIRONMENT GUIDE US?**
- **ARE WE PART OF NATURE /ARE WE NATURE?  
OR ARE HUMANS APART FROM NATURE?  
ABOVE NATURE?**

# PARADIGM SHIFT

- **SCIENCE AND COMMON SENSE TELLS US THAT THERE IS NOT A CELL IN OUR HUMAN BODY SYSTEM THAT IS 'APART' FROM NATURE-**
- **WE ARE NATURE .**

# PARADIGM SHIFT

- **HOWEVER, OUR POLITICAL PHILOSOPHY, OUR LEGAL SYSTEMS DENY THIS FACT AND ARE BASED ON THE PRESUMPTION OF 'HUMANS ABOVE NATURE'**
- **HUMANS ARE AT THE CENTRE AND ABOVE ALL OTHER NATURAL CREATIONS.**

# PARADIGM SHIFT

- **SO WE DEAL WITH NATURE AT OUR WILL, NOT BECAUSE WE HAVE ARE OBLIGED TO.**
- **NOT WITH MUTUAL UNDERSTANDING AND MUTUAL ADJUSTMENT [ PEACE AND HARMONY COULD BE AN OUTCOME]**
- **BUT AS A CLASH OF WILLS [ CHAOS AND DISORDER AND STRESS AS THE OUTCOME]**
- **THE SOURCE – WESTERN POLITICAL PHILOSPHY ADOPTED IN INDIA**

# PARADIGM SHIFT

- **ALL OUR NATURAL RESOURCES LAWS EVEN OUR CONSTITUTIONAL PROVISIONS ARE DESIGNED ON THE BASIS OF BRITISH ENVIRONMENTAL REALITY, NOT INDIA'S**
- **WATER – IN BRITAIN- IS A 'GIVEN' – IT RAINS ALL TWELVE MONTHS OF THE YEAR [' Rivers' are “drains”]**

# PARADIGM SHIFT

- **IN INDIA, WE HAVE THE MONSOON : THE MAIN SOURCE OF WATER.**
- **VERY LITTLE SNOW, MOSTLY RAIN**
  - **IT IS TIME BOUND – FOUR MONTHS OF THE YEAR-**
  - **ACTUALLY 50 DAYS-**
  - **HEAVY SHORT SHOWERS, NOT ALL 24 HOURS**
  - **ACTUALLY 100 HOURS**
  - **50 % IN ONLY 20 HOURS.**
- **IT MAY BE NORMAL, SUB NORMAL, SUPER NORMAL.**

# PARADIGM SHIFT

- **HOW DO WE AS A SOCIETY DEAL WITH THE MONSOON? HOW DO WE MAKE OPTIMUM USE OF THIS OPPORTUNITY EVERY YEAR?**
- **WE MOSTLY JUST ENJOY IT AND WATCH ALL THE WATER FLOW AWAY DOWN TO THE SEA – ‘RIVERS AS DRAINS’**
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# PARADIGM SHIFT

- **DO WE AS A SOCIETY MOBILIZE MATERIAL AND HUMAN RESOURCES TO HARVEST THE MONSOON IN THE SHORT PERIOD OF TIME?  
- NO**
- **DO WE AS A SOCIETY SPEND THE REST OF THE YEAR CONSERVING AND PROTECTIING THAT WATER TILL THE NEXT MONSOON? NO**
- **DO OUR LEGAL, ECONOMIC, SOCIAL SYSTEMS ENABLE US AS A SOCIETY TO DO THIS? NO**

# PARADIGM SHIFT

- **CLIMATE CHANGE HAS TRIGGERED SOME CHANGES BUT HAS NOT SHIFTED US OUT OF THE MONSOON PATTERN INTO TEMPORATE CLIMATES.**
- **WE ARE STILL IN THE MONSOON SYSTEM**

# PARADIGM SHIFT

- **WHAT KIND OF POLITICO PHILOSOPHY, ECONOMIC AND LEGAL SYSTEMS, INSTITUTIONS, TECHNOLOGIES AND CITIZEN-STATE COOPERATION DO WE NEED TO LIVE IN A MONSOON BASED SYSTEM?**
- **HOW SHOULD A MONSOON BASED SOCIETY LIVE AND ORDER ITS AFFAIRS?**

# PARADIGM SHIFT

- **MY STRONG BELIEF IS THAT THIS SHOULD BE THE STARTING POINT OF DISCUSSION ON ALL NAUTRAL RESORUCES IN INDA, INCLUDING GROUNDWATER, AS A FIRST STEP TOWARDS ENVIRONMENTLLY SUSTAINABLE DEVELOPMENT.**
- **SOLUTIONS TO GROUNDWATER PROBLEMS ARE LOCATED IN THIS PARADIGM SHIFT**

# **GROUNDWATER**

## **INEVITABLES:**

- **SUSTAINABILITY – QUANTITY AND QUALITY**
- **EQUITY**

# CENTRALITY OF LAND TO GROUNDWATER

- Equity : ubiquitous issue, because groundwater access is tied to land access. So land is the issue.
- Quality: also ubiquitous - Sources of pollution are ubiquitous- whether rural or urban, whether agriculture or industry, or other occupations. The quality issue is also related to land - because pollutants reach groundwater through land.
- Scarcity is not the same everywhere- there is more or less scarcity in different parts of the country. But Scarcity is also related to land – land is used for overdraft, or land is not managed to recharge groundwater.

# CENTRALITY OF LAND TO GROUNDWATER

- CANNOT AVOID policy or law on land resources while looking at groundwater, legally or at policy level.
- As far back as 1980: **Ministry of Agriculture - as 175 million hectares (mha) out of a total of 305 mha for which records exist, [57%] were subject to environmental problems**
- 1986 - a National Land-Use Policy Outline, with a 19 point Action Programme prepared and circulated to all states. By 2002, only Uttar Pradesh and Kerala had prepared a draft Land Use Policy. No response from any other States.

## CENTRALITY OF LAND TO GROUNDWATER

- A host of institutions exist at Central and State level and a host of programmes and schemes Central and State- on land – yet: 2010, govt reports 39% land degradation [seems to be an underestimation]
- Welcome Development: Draft National Land Utilization Policy 2013.



# CENTRALITY OF LAND TO GROUNDWATER

- Govt of India acknowledges:
- “There is lack of comprehensive and integrated land use planning in the country, which enables rationale and optimal land utilisation.
- The current land use planning in the country is inadequate and does not cover all the levels of local, regional as well as at state levels.
- There is a need for a systematic and scientifically based land use planning”

# CENTRALITY OF LAND TO GROUNDWATER

- “There is also lack of adequate institutional structures at national, state, regional/district and local levels for planning and management of land resource. “

# Draft National Land Utilization Policy 2013.

**The policy acknowledges the various functions and facilities provided by land resources:**

- Soil
- Water channels
- Drainage channels
- Rivers
- Groundwater
- Catchment areas / watersheds
- Biodiversity
- Ecosystems
- Forests
- Minerals

# Draft National Land Utilization Policy 2013.

**Takes into account several existing policies relating to land use.**

- **National Water Policy 2013,**
- **National Land Use Policy Outlines 1988,**
- **National Forest Policy 1988,**
- **Policy Statement of Abatement of Pollution 1992,**
- **National Livestock Policy Perspective, 1996,**
- **National Agricultural Policy 2000,**
- **National Population Policy 2000,**
- **National Policy and Macro-level Strategy and Action Plan on Biodiversity 2000**
- **National Environmental Policy 2006**
- **Draft National Water Policy (2012)**

# Draft National Land Utilization Policy 2013.

**The draft takes into account all sectors of land use:**

- **Urban development**
- **Mining**
- **Infrastructure**
- **Agriculture**
- **Industrial Sector**
- **SEZ**
- **Transport sector**
- **Heritage and cultural sites.**
- **Eco sensitive zones**
- **Coastal zones**

# Draft National Land Utilization Policy 2013.

**HOWEVER, SERIOUS LACUNAE:**

- **WATER RESOURCES NOT DEALT WITH SPECIFICALLY.**
- **ONLY AS PART OF ' ECOSYSTEM SERVICES' - SHOULD HAVE BEEN PRIMARY.**

**“GUIDING PRINCIPLES” : WATER IS ABSENT. LAND USE VIS-A-VIS MONSOON SHOULD HAVE BEEN PRIMARY.**

- **GOAL: “FOOD AND WATER SECURITY”, BUT IN OBJECTIVES, WATER IS COMPLETELY MISSING.**

**WHY?????**

**PERHAPS DOLR IS BEING SENSITIVE TO MOWR'S TURF**

- **CAN WE REALLY AFFORD THIS???**

# Draft National Land Utilization Policy 2013

## **7th Principle: Harmonization with existing policy, legislative and regulatory framework**

**“The existing constitutional provisions and rights, the existing laws, rules, standards, procedures, guidelines and stipulations brought out by various ministries, departments and institutions of the Government of India, as applicable to land utilisation policy shall continue to be in force for taking decisions on land matters and land use changes. “**

- SO WHICH WILL TAKE PRECEDENCE?**
- NO SCOPE FOR INNOVATION.**

# EQUITY

- **EQUITY TIED TO LAND ACCESS**
- INEQUITY OF LAND HOLDING
- FRAGMENTATION AND MARGINALIZATION OF HOLDINGS.
- WEAK / NONEXISTENT TENANCY REFORMS - TENANTS' SECURITY OF TENURE AFFECTED
- MORE RIGOUROUS LAND REFORM REQUIRED SO THAT LAND RIGHTS ARE AVAILABLE TO ALL.



# EQUITY

Current era of liberalization and globalization -  
new policy directions on land issues.

- rolling back land ceiling laws
- Land ceilings are being viewed as detrimental to achieving higher investments in the agricultural sector and diversification to high-tech agriculture.

# EQUITY

- Secondly - emphasis is on improving land revenue administration and clarity in land records, so that titling and registration would bring about security in land tenure, an important pre-requisite for the introduction of land markets.
- Similar to the clarity in water rights that are sought to be achieved, through the World Bank sponsored water sector reforms, to enable water trading.

# EQUITY

- How the resource-poor sections of the population will acquire the competence to participate and compete in the market is a moot point.
- The history of land and water resource use since Independence has shown that it is the affluent sections of the population who have benefited most from improved technologies and institutions.

## **Draft National Land Reforms Policy 2013**

- **Again a welcome development- in addition to land rights for poor, CPRs are also emphasized [ water bodies, watersheds].**
- **BIG QUESTION: MILLIONS OF PEOPLE DESERVE LAND AND GROUND WATER RIGHTS – MORE PRESSURE**
- **WHAT ABOUT THE AVAILABILITY? HOW TO ENSURE AVAILABILITY?**

# DELINKING LAND AND GROUNDWATER

- **DELINKING ONLY IN TERMS OF RIGHTS , NOT MANAGEMENT!!**
- **GROUNDWATER AS COMMON PROPERTY – IN STATE CONTROL UNDER TRUST-**
- **STATE INCLUDES LOCAL ELECTED BODIES**
- **NATIONALIZATION OF ALL WELLS**
- **WELLS TO BE USED UNDER LICENSE BY GROUPS/ COMMUNITIES REGULATED BY LOCAL BODIES**
- **LAND USE PLANNING, REGULATION AND MANAGEMENT ALSO THROUGH LOCAL BODIES**
- **RAINWATER HARVESTING MANDATORY**

# **OVERALL SUGGESTIONS**

- **CREATE OPPORTUNITY FOR PEOPLE AT ALL LEVELS TO RECOGNIZE, UNDERSTAND NATURE AND ITS RULES AND CONSTRAINTS AND DEVISE MEANS TO CO-EXIST WITH NATURE WHILE REALIZING GROWTH POTENTIAL**
- **THROUGH ALTERNATE LEGAL SYSTEMS**

# OVERALL SUGGESTIONS

## STRATEGY:

- **WATERSHED LAW / INTEGRATED NATURAL RESOURCES LAW [ EXAMPLE USA SINCE THE 50'S; SOUTH AUSTRALIA 2004; EU COUNTRIES ]**
- **CONSTITUTIONAL AMENDMENTS**
  
- **BASIC PRINCIPLES**
- **RIGHTS DEFINITION**
- **INSTITUTIONS**
- **RESPONSIBILITIES AND POWERS**

# **OVERALL SUGGESTIONS**

- **HAVE WORKSHOPS; PREPARE DRAFT; DEBATE; ADVOCACY**
- **[DCAP EXERCISE IN MP RAJIV GANDHI WATERSHED MISSION- DRAFT LAW FOR COMMUNITY REGULATION OF WATERSHEDS]**

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