A New Vikasvaad and the role of knowledge

Milind Sohoni, CSE and CTARA, IIT Bombay
The agenda

- The questions of development and possible answers
- How is development delivered - Structure of society
- The knowledge deficit and how to bridge it
- Unnat Maharashtra Abhiyan
- Its problems and a more detailed structure
- Whats next
- A historical and sociological digression

Advocacy: Advising the customer rather than the producer of a public service, good.
Broad Developmental Questions

Why did Chiplun flood again? Were the reservoir gates really open?

How many did die in Covid 19? How many hospital beds should we prepare for?

Why are there potholes on our roads?

Why is their persistent malnutrition?

How did Powai lake get polluted right under the very nose of the top engineering institution in India?

**Questions:** Unexpected events and also regular course. Most related to the performance of the state, and some the market.
More structure…

Knowledge: Do we know how to (eventually) solve these?

Agency: Do we (or can we) have the agencies who will do it?

Incentive and Realization: Do we know how to pay these agents - money, prestige, value?
Some diagnoses

Politicians are corrupt. They do not take correct decisions. They focus on wrong issues.

People are undisciplined and do not take care. They don’t pay taxes. People are uneducated and foolish.

The state is excessively bureaucratic and slow.

The top bureaucracy is competent, but that is not so, lower down,

The top bureaucracy is not competent. The state does not have the capacity to do all these things.

There is no money for all these things. People cannot afford these things.
People being served by state and private agents. Note that both sides are frequently the same persons, but in different roles. A bus-conductor staying in a colony, or an auto-driver in a slum, or an executive in a tony neighborhood.

But this is no good in analysing what to do…
The world before Man-ki-baat

- The people are stupid or unknowing to elect corrupt and incompetent politicians.
- The state is incompetent and the private sector, uncaring.
Man-ki-baat world of high school: जाणता राजा Leadership

State

History Culture परंपरा

People Practices

Politicians
The people are not stupid. In fact, they can change under able guidance.

The politicians were corrupt or incompetent and could not control the state or the private sector and deliver development.

Good intentions and hard work are enough to get things done.

History and Culture. Moreover, it has been so before, so it can happen again.
Vikasvaad 1.0 - The Indian state

- Private Sector
- State
  - Practices
- Laws, Rules and Regulations
- Bureaucrats
- People
  - Practices
- Politicians
The Indian State

A recognition that the state has:

1. Some rules, laws and regulations which are to be formulated with the help of bureaucrats.
2. Each department of the state has practices which encode the way its agents function and record its outcomes.
3. Bureaucrats have to ensure that the departments and the private sector observes the rules and regulations.
4. They also have to ensure that the practices and the laws etc. are updated as the situation changes or as policy changes.

- How are policies and practices to be designed? The super-competent IAS
- The salience of the Bureaucrat and the ability of the Politician to manage them. Wise leadership as a key determinant of development outcomes.
The Indian Knowledge State

Private Sector

State

Practices

Laws, Rules and Regulations

Bureaucrats

Scientific Agencies
MPCB, GSDA

University
Professors
Professions

People

Politicians
The Knowledge Agencies

The University - Certification-based - synchronized with the rise of the government job - state funded, but neither Nalanda nor the land-grant state university.

- Training manpower for standard set of professions and positions.
- Satisfying statistical requirements of gross enrollment
- Regulating legitimate knowledge and creating a vested salaried interest called teachers to mediate with youth political thought. The graphite rods in the reactor.
- Providing standard consultancy to state agencies

The State Technical Agencies

- Cadre of state-salaried scientists.
- Provide technical, regulatory and policy support to state agencies in standard ways.

And yet all committees headed and filled with bureaucrats.

- DES and DPO: provide economic and financial data for state budgets
- SPVs such as MMRDA
Broad Questions - The Indian Knowledge state will fail


<table>
<thead>
<tr>
<th>Ahmednagar, as on 8th June, 2021</th>
<th>ICU-Beds/lakh</th>
<th>Days to Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public hospitals</td>
<td>15</td>
<td>4.9</td>
</tr>
<tr>
<td>Private Hospitals</td>
<td>55</td>
<td>9.4</td>
</tr>
</tbody>
</table>

**Oxygen: Grand failure. Basic Errors.**
Broad Questions - The Indian Knowledge state will fail

Why are their pot holes on our roads? Solvable in Man-Ki-Baat world and current methods. Tendering and contracting weaknesses can be overcome by leadership. But where are the ready mixes?

Why did Chiplun flood again? Were the reservoir gates really open? Insufficient measurement and analysis by WRD or universities. No regular reporting with MoUD. Nothing that the divisional commissioner, the WRD secretary, the EE can do. Kolhapur - 6 month committee - a problem which would need 3-4 years of intense work and about 5-10 Masters projects.
### Staff Strength
1.05 lakhs

### Number of Buses
15500

### Staff per Bus
5.79

### KM per Bus per Day
310 km

### KM per Staff Per Day
54 km

### Fuel Efficiency
4.76 km/liter

<table>
<thead>
<tr>
<th>Punctuality at Starting Stop</th>
<th>7%</th>
<th>45%</th>
<th>23%</th>
<th>19%</th>
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<tbody>
<tr>
<td>Early</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-10 min.</td>
<td>7%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10-20</td>
<td></td>
<td>45%</td>
<td></td>
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<tr>
<td>More than 20 min.</td>
<td></td>
<td></td>
<td>23%</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Normalized EPKM Range</th>
<th>Trip Profitability</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>&gt;Rs 43</td>
<td>15 %</td>
</tr>
<tr>
<td>B</td>
<td>Rs 22-43</td>
<td>40 %</td>
</tr>
<tr>
<td>C</td>
<td>&lt;Rs. 22</td>
<td>45 %</td>
</tr>
</tbody>
</table>
So how are students coming to school?

<table>
<thead>
<tr>
<th>Village Name</th>
<th>Distance (Village Centroid to School) (in km)</th>
<th>Travel Mode Choice</th>
<th>Distance from bus/road network to school</th>
<th>Village centroid to road</th>
<th>Bus/road network</th>
<th>Village centroid to bus/road network</th>
<th>Remar k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jambulwad</td>
<td>0.408</td>
<td>7.203</td>
<td>0.103</td>
<td>Walk</td>
<td>Jeep/walk</td>
<td>Walk</td>
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<tr>
<td>Ranvihir</td>
<td>2.482</td>
<td>2.085</td>
<td>0.103</td>
<td>Walk</td>
<td>Bus</td>
<td>Walk</td>
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</tr>
<tr>
<td>Bhinari</td>
<td>1.057</td>
<td>3.732</td>
<td>0.103</td>
<td>Walk</td>
<td>Walk</td>
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<tr>
<td>Kharade</td>
<td>0.603</td>
<td>2.218</td>
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<td>Walk</td>
<td>Walk</td>
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<tr>
<td>Talwade</td>
<td>0.836</td>
<td>4.745</td>
<td>0.103</td>
<td>Walk</td>
<td>Jeep</td>
<td>Walk</td>
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<tr>
<td>Malad</td>
<td>1.887</td>
<td>6.981</td>
<td>0.103</td>
<td>Walk</td>
<td>Walk</td>
<td>Walk</td>
<td>Road is there but no bus</td>
</tr>
<tr>
<td>Dehene</td>
<td>2.287</td>
<td>11.569</td>
<td>0.103</td>
<td>Walk</td>
<td>Bus</td>
<td>Walk</td>
<td></td>
</tr>
<tr>
<td>Hinglud</td>
<td>1.042</td>
<td>7.219</td>
<td>0.103</td>
<td>Walk</td>
<td>Walk</td>
<td>Walk</td>
<td></td>
</tr>
<tr>
<td>Panchghar</td>
<td>0.410</td>
<td>10.207</td>
<td>0.103</td>
<td>Walk</td>
<td>Bus</td>
<td>Walk</td>
<td></td>
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<tr>
<td>Chondhe Bk.</td>
<td>1.250</td>
<td>13.303</td>
<td>0.103</td>
<td>Walk</td>
<td>Bus</td>
<td>Walk</td>
<td></td>
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<tr>
<td>Chondhe Kh.</td>
<td>3.799</td>
<td>13.303</td>
<td>0.103</td>
<td>Walk</td>
<td>Bus</td>
<td>Walk</td>
<td></td>
</tr>
</tbody>
</table>
Drinking Water

Two GPs in Karjat Taluka 2011-12 -

Inability to factually report current status that most schemes are failing within 10 years.

Nothing could be done in the then workflows.
Drinking Water

Two GPs in Karjat Taluka 2011-12 -

Knowledge Failure: Most are routine.
Inability to document the situation, analyse and adapt procedures and practices.

Conclusion: Many of the problems beyond the capacity of the wise politician.
The Indian Knowledge State - Post-Independence

Private Sector

State

Practices

Scientific Agencies

MPCB, GSDA

Laws, Rules and Regulations

Bureaucrats

University

Professors

Professions

GoI

People

Politicians
The Nehru plan- How GoI planned to influence

CGWB, CPCB, ISI, RRI

Planning Commission
PMO, PSA-PM

IIT, IIM, SPA
AIIMS, JNU

DST, UGC, AICTE

Scientific Agencies
MPCB, GSDA

Laws, Rules and Regulations

Bureaucrats

University Professors Curriculum
How GoI planned to influence

- Bureaucrats
- University Professors
- Curriculum
- Scientific Agencies
  - MPCB, GSDA
- CGWB, C
  - ISI, RRI
- DRDO, ISRO, DAE
- IIT, IIM, SPA
  - AIIMS, JNU
- Planning Commission
- PMO, PSA-PM
- DST, UGC,
  - AICTE
- DRDO, ISRO, DAE
How GoI planned to influence

- **Laws, Rules and Regulations**
  - CGWB, CPCB, ISI, RRI, ICAR
  - Planning Commission
  - PMO, PSA-PM

- **Bureaucrats**

- **University Professors**
  - IIT, IIM, AIIMS, JNU
  - DST, UGC, AICTE

- **Curriculum**

- **Scientific Agencies**
  - MPCB, GSDA

- **Science & Technology**
  - Gaining data and statistics, setting standards.

- **Most public research funding concentrated**
  - In GoI. Or through state S&T commissions - miniscule.

- **Most state-level departments have zero**
  - R&D funding.

- **Most curricula, teaching loads, promotions**
  - Are regulated.

- **Now through competitive exams, most**
  - School curricula (indirectly) regulated too.

Explicit constitutional provisions - either sole ownership or heavily loaded.
How GoI planned to influence

Laws, Rules and Regulations
Bureaucrats
University Professors
Curriculum
Scientific Agencies
MPCB, GSDA
CGWB, CPCB, ISI, RRI, ICAR
Planning Commission
PMO, PSA-PM
IIT, IIM, AIIMS

Explicit constitutional provisions - either sole ownership or heavily loaded.

Science & Technology, gathering data and statistics, setting standards.
Research funding concentrated in GoI. Or through state S&T commissions - miniscule.
Most state-level departments have zero R&D funding.
Most curricula, teaching loads, promotions are regulated.
Now through competitive exams, most school curricula too.

Most GoI knowledge institutions are unaccountable - the ultimate रेवडीs
Each is a story by itself.
Example: IIT

The primary objectives of IITs are as follows:

- To create an environment that encourages freedom of thought and pursuit of excellence and inculcate the necessary vision and self-discipline to achieve excellence.
- To build a solid foundation of scientific and technical knowledge and to prepare competent and motivated engineers and scientists.
- To kindle an entrepreneurial spirit among the students.
- To prepare the students to become outstanding professionals and contribute to nation building.
The University of Illinois at Urbana-Champaign is charged by our state to enhance the lives of citizens in Illinois, across the nation and around the world through our leadership in learning, discovery, engagement and economic development.

We will be the pre-eminent* public research university with a land-grant mission and global impact.

**Clear role for the university**

Enhance the lives, citizens, Illinois, engagement, economic development, public research, land-grant mission
The students (2013) have clearly chosen not to serve the Indian customer or work for the Indian companies.

The promise of global citizenship.

Largely arbitrage in the global job market.
Nor have our professors (2015)

Now - Climate Change, AI-ML and new plastics to achieve Sustainable Development Goals.

Main departments unlikely to work on development problems. Doubtful if they have the temparament or the capability.
The policy route - of advising the producer through evidence - should be deemed as failed…

What is to be done?
What is to be done?

Simplify…Localize

Go to Tier-II state colleges and their teachers as alternate producers of knowledge
What is to be done?

**MSRTC**

Bus despatch times were not logged.

Occupancy was not tracked.

College and school timings, weekly markets etc. were not used.

Follow up with PWD on road condition was not done.

IT-based tracking was not done.

**Rural Water Supply**

Groundwater sources were not tested.

Energy costs were huge. Appropriate community analysis was not done.

Key *wadis* were missed in design.

Many of the assets were of poor quality. But they were never checked.
What is to be done?

- The analysis and the corrective actions were simple enough.
- Moreover, they could be codified as standard “consultancy reports”.
- These could be executed by suitably trained, but ordinary college students as B.Tech projects with the support of faculty members or staff.
- There are many locations - bus depots, agri. electricity, anganwadis, PHCs, PWS, GPs and towns.
- These could enhance the reputation of the institution and the skill-set of the student.
- This could benefit the enterprise.
Advocating Idea: The Great Alignment

Steps

1. Demonstrate in a concrete sectors how new knowledge will improve outcomes - GR 15th June 2015
2. Argue that this is also a matter of higher education
3. Prepare the state to engage.
4. Prepare the University to Engage

<table>
<thead>
<tr>
<th>District</th>
<th>Palghar</th>
<th>Thane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of schemes</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Sanctioned amount</td>
<td>Rs. 28.2 Cr.</td>
<td>Rs. 6.4 Cr.</td>
</tr>
<tr>
<td>Minor Problems (Source)</td>
<td>9/19</td>
<td>10/12</td>
</tr>
<tr>
<td>Major Problems (Design)</td>
<td>7/19</td>
<td>9/12</td>
</tr>
</tbody>
</table>

Leg-work done by CTARA
The Old University

Private Sector

State

Practices

People

University

Professors

Professions

Join, Support

Prepare Employees
The New University - USA (land-grant), Japan, Korea…

Private Sector

State

Practices

Study, Analyse
Provide new job
definitions, new
processes

People

Prepare Employees

Join, Support

University Professors
Curricula

Report,
Advise,
Study,
Guide

Seek Civil Society Role, Innovate on Pedagogy
Analyse, Motivate, provide new role models.
Unnat Maharashtra Abhiyan: Program Objectives and Description

Connecting HTE with the development sector

Preamble:

- Reform teaching, curricula and research in HTE to align with development objectives
- Train future professionals for development Objectives
- Enable institutes to work with regional agencies to help them and become resource and knowledge center - Through Key GRs
- Provision of Data, Analysis and Funding
- Provide mechanism for citizens to approach institutions
UMA Institutes

Selection on the basis of ability to carry out the required engagement.

Total Participating Institutes: 75
- Technical Institutes: 35
- Govt. Polytechnic: 40

Next 2 Years: 3-4 Science/Arts college in each district
1. Build Case studies in chosen sectors and show benefits.
2. Canvas for instrument / GR from department
3. Offer workshop for UMA colleges.
4. Bring funding and make a course and even a Textbook!
5. Build pressure on Universities to adopt in curricula.

Mainstream liaison with department. Do great research. Comprehend how the state works!
Workshops for Colleges

GIS Framework for Taluka Bus
Transportation Analysis and Provisioning

Submitted by:
Asha Kant

For the award of the degree of
Master of Technology

Under the supervision of:
Milind A. Salunkhe
Professor CSE and CSE
IIT Bombay

Apaji Institute of Mathematics and Applied Computer Technology
Bhosari, Vidyapur
Bhosari- 404112 (India)
Sessions: 2019-2020
Jalyukta Shivar, Rural Water Supply and Electricity: UMA Colleges and Talukas
Field Work
**UMA : Key GRs**

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>13&lt;sup&gt;th&lt;/sup&gt; Jan. 2016.</td>
<td>Main UMA GR, Listing of Colleges and Topics: enabling student projects and faculty research, 17 TEQIP Colleges</td>
</tr>
<tr>
<td>7&lt;sup&gt;th&lt;/sup&gt; Apr. 2016</td>
<td>UMA Institute : Source of funds, up to 25% of District Innovative fund.</td>
</tr>
<tr>
<td>15&lt;sup&gt;th&lt;/sup&gt; June 2016</td>
<td><strong>UBA-UMA GR Topics, Guidelines, District Coordinating Institutes</strong></td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; July. 2017</td>
<td>Empanelment of 12 private colleges under UMA in addition to the original list</td>
</tr>
<tr>
<td>25&lt;sup&gt;th&lt;/sup&gt; Oct. 2018</td>
<td>Provision of funds for UMA Scheme.</td>
</tr>
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<td>25&lt;sup&gt;th&lt;/sup&gt; Sept. 2018</td>
<td>UMA colleges are empaneled as TPA, Appointment of DPO as District Nodal Officer and M&amp;E fund (0.5% of the Annual Plan) can be accessed by UMA. (Reference - GR. 26&lt;sup&gt;th&lt;/sup&gt; Sept. 2017)</td>
</tr>
<tr>
<td>6&lt;sup&gt;th&lt;/sup&gt; Mar. 2019</td>
<td>Empanelment of UMA colleges for TPI of Jalyukta Shivar</td>
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<tr>
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<td>Procedures to take R&amp;D work of WRD, Listing of sample work.</td>
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<td>Date</td>
<td>Details</td>
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<tr>
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<td>5&lt;sup&gt;th&lt;/sup&gt; July 2017</td>
<td>Extending the list of eligible colleges and providing guidelines for the selection process</td>
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<td>Considerable GoM Buy-In But harder Academia Buy-In</td>
</tr>
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</table>
Sample Projects Funded by HTE GoM 2022-23

Standard line item in budget now!

<table>
<thead>
<tr>
<th>S.N</th>
<th>Topic / Theme</th>
<th>Duration</th>
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<tbody>
<tr>
<td>1</td>
<td>Helping MSME by linking them with Engg. Colleges (Pilot with two colleges)</td>
<td>6 man-months</td>
</tr>
<tr>
<td>2</td>
<td>Mumbai University faculty and college training on Case study methodology in Curriculum</td>
<td>10 man-months</td>
</tr>
<tr>
<td>3</td>
<td>Thematic workshop on MSEDCL Agri. Feeders</td>
<td>10 man-months</td>
</tr>
<tr>
<td>4</td>
<td>Thematic Workshop on Third Party Audit for Water Resources Department Projects.</td>
<td>10 man-months</td>
</tr>
<tr>
<td>5</td>
<td>&quot;Unnat Maharashtra Abhiyan&quot; orientation workshop for Government Polytechnics</td>
<td>2 man-months</td>
</tr>
<tr>
<td>6</td>
<td>Study of outcomes of Engg. Education in 3 institutions.</td>
<td>10 man-months</td>
</tr>
<tr>
<td>7</td>
<td>Preparation of Census and related GIS sets for MH</td>
<td>10 man-months</td>
</tr>
</tbody>
</table>
Hurdles and Limitations

1. Little participation of the top 5-6 (state) colleges. The same incentive mismatch as in the IITs.
   - 70% students in MNC arbitrage, 30% in core sector
   - **Faculty disinterest** - secure salary, easier to work on Fuzzy Logic and gain promotion points
   - Institutional funk
2. Better participation from regional private institutions - about 10 success stories. Even here student, faculty distraction, institutional weakness, inability to sustain engagement with district authorities.
3. No real support from district administration or liaison by regional HTE officers
4. **Aspirational dysfunction** - prefer to spend 2-3 years dreaming about 40K IT job than take up 20K job or work on development sector and earn 40K. Classic rent-seeking.
5. **Extremely counter-productive Govt messaging -** sunrise sectors of biotechnology, robotics, mechatronics, IoT, block-chain, AI-ML - **NOT ONE HONEST STUDY IN FIVE DECADES**
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   - Not ONE HONEST STUDY IN DECADES


On the Whole:

Success 35%.

Exhausting - Needs a second Bottom-Up Front
Main Output: Entry into GoM, Precedence, Blue Prints, Tool Kits

Partial recognition that development sector is not “social work” but professional work
Need to get closer to college students
Structure of Indian Society - again

Informal Sector

P2 Vernacular People

State Administration

P1 National Order

Formal Sector

English, Engg.

CBSE

JEE

Multilateral Agencies, Consulties

P0 Global Order

MNCs

AI/ML, IT

IB, GRE

Provide Transport, Water

Pay

Own and Guide
Education in India

The education system of upward-compatibility. Aspirational dysfunction: Basic function to dissipate youth energy?
Create losers who accept they have lost! …Gramsci and hegemony…

**Four outcomes**

1. Injured with package
2. Injured without package
3. Ran away
4. Sat out
UMA 1: Telling P2 who hope to migrate to P1 to learn how the state administration serves P2. That did not catch the imagination of the students.
What is to be done?

Simplify…Localize
Talk to P2 colleges,
communities and students.
Education in India

UMA 2: P2 to P2. Pick simpler tasks. Move to taluka-level degree college students.
आपले प्रश्न - आपले विज्ञान

आय.आय.टी. मुंबई व महाराष्ट्र शासनाचा नवीन उपक्रम

उद्दिष्ट

- गाव/शहर/छोटे उद्योग यांच्या प्रश्नांचा अभ्यास व त्यांचे अहवाल
- आपले गाव आणि आपले प्रश्न या बद्दल लागणारी गावकी आणि माहिती ची निर्मिती

युवा पिठीचा समाजाबद्दलचा अनुभव वाढवणे आणि कौशल्य निर्माण करणे

कार्यपद्धती - केस स्टडी - प्रादेशिक अभ्यास

- लोकांना पडणारे प्रश्न - उद्योजक, लोकप्रतिनिधी, गाव, वाडी, स्वतःचे कुटुंब
- काही प्रश्नांची निवड व अभ्यासात व स्वरूप व पद्धत ठरवणे
- अभ्यास - field work and interdisciplinary skills
- अहवाल तयार करणे - अहवालाचे मूल्यमापन व प्रकाशन व संबंधित पाठपुरावा

मध्य बाबा: दौडंगाव विद्यापीठाच्या नवीन अभ्यासक्रमात बसणारे
Talking directly with rural college students about:

- Employment and number of graduates data
- ...and what awaits them in the city
- Skills they should or do expect as a graduate
- How to get those skills
- Immediate vicinity as source of engagement
Village-level case-studies

- Balance sheets of local MSME
- Agricultural production
- ST timings and alignment
- Drinking water sources and maps
- Anganwadi report

Link villages with their college via the student and assisted by the BDO.
Focault - But is this Science?

The loop of Science - Falsifiable and Replicable - is the construction of theories which match observations. Cultural skills of postulation and argumentation. And aesthetics - what is an improvement?
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Broken in Indian Science.
But does mainstream Science any longer have the expected attributes?

We seem to be trapped in a Stylized Science which is ineffective, which is neither replicable nor falsifiable. A world of cutting-edge science - of quantum computing, and carbon sequestration - delivered by world class universities and companies.
But does mainstream Science any longer have the expected attributes?

We seem to be trapped in a Stylized Science which is ineffective, which is neither replicable nor falsifiable. A world of cutting-edge science - of quantum computing, and carbon sequestration - delivered by world class universities and companies. A Science of Scientists and Beneficiaries.

...and policies which serve elite interests.
The delivery problem in development needs a more effective and participatory Science

Emergence of “Vernacular” Science of the people, of ordinary citizens - of painstaking measurements and analysis of their own plights - their own means of legitimization by outcomes.

A reality of bus depots and anganwadi, of broken water supply systems and small enterprises.
Final Message

- Massive decentralization of Science and the University to the taluka level.
- To move to a knowledge system which is accountable to the people, which supports the Right to Analysis, and which is replicable and participatory.
- And we need a matching Bureaucracy!

Politicians can do little to deliver development - They can do a lot more by holding our Scientists, Bureaucrats and Professors accountable.

Time of great essence: Unemployment in youth is raging at 25%-40%.

Vikasvaad 2.0

वर्तमानवाद+भौतिक वास्तववाद → लाभार्थीवाद + परंपरा-वाद + अस्मितावाद ++
विज्ञान - म्हणजे
विज्ञान - म्हणजेच - व्यवहार ज्ञान

वास्तवाची प्रामाणिक नोंद आणि विश्लेषण हेच खरे विज्ञान
Thank you.

The Historical and Sociological Excursions? 8 minutes.
Excursion 1 - The Indian state

Private Sector

State

Practices

Laws, Rules and Regulations

Bureaucrats

People Practices

Politicians
But many historical connections - Kautilyan, Chinese and Mughal

1. The historical role of the bureaucracy - the “best” from the common people. **Indian version:** Prestige without accountability. Nothing is measured. Departments have expenditure statements but no performance report.

   Elite Agency: **Classic Indian** Belief in power concentration to be filled by the exceptionally gifted.

2. **Oriental Despotism** : "law of diminishing administrative returns" kept rulers from controlling all aspects of their subjects' lives, so that "genuine elements of freedom remained." This freedom, however, amounted only to a "beggar's democracy." The "rationality coefficient" of hydraulic society" means the society’s ability to get things done, operating at three levels at which the government must be effective: managing the agrarian economy, ("managerial"); using corvee and taxes, ("consumptive"); and maintaining peace and order, ("judicial"). **But did the ancien ever want free will?**

3. Mughal era: Huge knowledge imports, growth through the merchant economy and the swelling central coffers and pauperizing the local state - huge inequality.
Excursion 2: Elementary Structure of Indian Society

- **P2 Vernacular People**: Informal Sector
- **State Administration**: English, Science
- **CBSE JEE**
- **Multi-lateral Agencies, Consulties**: Pay
- **P1 National Order**
- **AI/ML, IT**
- **IB, GRE**
- **P0 Global Order**: MNCs
- **Own and Guide**
- **Formal Sector**
- **Informal Sector**
- **Provide Transport, Water**
- **Multi-national Companies**
We the people …

1. The people P are really P1, a top 5-10% and P2 the remaining. P1 is largely urban, “national” and English-skilled and salaried. P1 runs a trades deficit. P2 runs a trade surplus.

2. P2: Labharthi. Largely, no civil society role or citizenship for P2. Not based on enlightenment or a better and more capable or discerning individual.

3. P2: Pre-modern associations of caste, religion. No special interests or pressure group - public-transport commuters association, or ration-card holders association. But pensioners in P1 is an important pressure group.

4. Many of our questions are P1 articulations of P2’s problems. Can P2 feel? Can it speak? Can it articulate? It is heard?

5. P1 remains one of the most uncreative of the rich people in the world. Few authors, thinkers, philosophers, historians, sportspersons…public people.
So, when will the virtuous loop of the Science of Delivery start?

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