National Policy Dialogue on water policy in Moldova

REVIEW OF DOMESTIC FINANCIAL SUPPORT MECHANISMS IN THE WATER AND SANITATION SECTOR IN MOLDOVA

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The project

This project aims at streamlining and strengthening the mechanisms that channel domestic financial support to WSS in Moldova.

The project is co-sponsored by the EU and OECD

Key results: mapping and reviewing existing mechanisms and recommending adjustments, based on thorough analysis and good international practice.

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Methodology of the review

Social Measures in WSS

I. Supply measures
  I.1 Increasing connectivity in WSS
     - Infrastructure provision
     - Capital expenditure subsidies

II. Tariff related measures
  II.1 Water conservation programmes
  II.2 Extent of full cost recovery
     - II.2.1 Extent of operating costs, capital costs
     - II.2.2 Extent of resource costs
     - II.2.3 Extent of environmental costs
  II.3 Extent of cross subsidisation
     - II.3.1 Other sectors to WSS
     - II.3.2 Other customers to households
  II.4 Tariff structure and level
     - II.4.1 Tariff structure
     - II.4.2 Tariff choice
     - II.4.3 Ex ante rebates and discounts

III. Income support measures
  III.1 Ex post Tariff rebates and discounts
  III.2 Income assistant and vouchers
  III.3 Other hardship initiatives
  III.4 Payment assistance, loans and arrears forgiveness
### Fiscal discipline – overall public budgets

Fiscal discipline is quite robust – less than 1.5% variation in recent years

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Budget</td>
<td>Actual</td>
<td>Budget</td>
</tr>
<tr>
<td><strong>Central</strong></td>
<td>20,354,074</td>
<td>20,004,146</td>
<td>22,164,269</td>
</tr>
<tr>
<td><strong>Local</strong></td>
<td>7,842,099</td>
<td>8,187,210</td>
<td>8,855,301</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>12,977,500</td>
<td>12,849,200</td>
<td>13,865,815</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41,173,673</strong></td>
<td><strong>41,040,555</strong></td>
<td><strong>44,885,384</strong></td>
</tr>
</tbody>
</table>
Fiscal discipline in the water/utilities sector is significantly worse – we observe significant variations both ways throughout the whole reviewed period (2009-2013)

Possible reasons poorly coordinated planning capacities and systems
State and local budgets – moving trends

Local public administration is noticeably increasing its role in WSS both in absolute and in relative terms.
WSS allocations by regions, w/o Chisinau

The central region spends more on WSS/Utilities while current level of WSS Service coverage is:
- North – 30.5%
- Centre – 27.4%
- South – 48.8%
Breakdown by economic type

CENTRAL GOVERNMENT funds have recently increased the share of capital expenditures while local budgets’ remain near 50%.
Ministry of Environment has substantially increased its allocations in recent years.

Capital expenditures vary from 40% in 2010 to 89% in 2013 (mostly due to CAPEX in externally financed projects).

20-30% is current transfers.
“Environmental funds” is traditionally the biggest budget program.

Water supply service development program comes next.

CAPEX in externally financed projects
Ministry of Regional Development and Construction – by programs

Over 90% of expenditures of MRDC in Water sector is made through the NFRD, all is capital expenditures.

<table>
<thead>
<tr>
<th>Ministry of Regional Development and Construction (total)</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Regional Development and Construction (WSS)</td>
<td>1,777,363</td>
<td>96,167,448</td>
<td>59,387,717</td>
<td>63,918,252</td>
</tr>
<tr>
<td>Urban planning/development in municipalities</td>
<td></td>
<td></td>
<td>993,480</td>
<td></td>
</tr>
<tr>
<td>Spending earmarked for emergency situations and coping with consequences of natural disasters</td>
<td></td>
<td>6,807,596</td>
<td>765,744</td>
<td>3,923,580</td>
</tr>
<tr>
<td>National Fund for Regional Development</td>
<td>1,777,363</td>
<td>89,359,853</td>
<td>57,628,493</td>
<td>59,265,308</td>
</tr>
<tr>
<td>Local public services modernization project</td>
<td></td>
<td></td>
<td></td>
<td>729,364</td>
</tr>
<tr>
<td>Ministry of Regional Development and Construction (WSS to total in %)</td>
<td>1%</td>
<td>36%</td>
<td>18%</td>
<td>19%</td>
</tr>
</tbody>
</table>
Financial flows of apacanals

As we observe, apacanals generate the vast majority of cash in the sector, i.e. WATER USERS are the biggest source of cash in the WSS sector.

While Direct social measures by apacanals are negligible.

<table>
<thead>
<tr>
<th>In thousands lei</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sales</strong></td>
<td>748,373</td>
</tr>
<tr>
<td>Total sales (households)</td>
<td>403,541</td>
</tr>
<tr>
<td>Total sales (businesses)</td>
<td>344,832</td>
</tr>
<tr>
<td><strong>Collection rate</strong></td>
<td>93%</td>
</tr>
<tr>
<td>Collection rate (households)</td>
<td>88%</td>
</tr>
<tr>
<td>Collection rate (businesses)</td>
<td>99%</td>
</tr>
<tr>
<td><strong>Sales by subsector</strong></td>
<td>748,373</td>
</tr>
<tr>
<td>Sales (water supply)</td>
<td>542,314</td>
</tr>
<tr>
<td>Sales (water sanitation)</td>
<td>206,060</td>
</tr>
<tr>
<td><strong>Grants and subsidies</strong></td>
<td>126,819</td>
</tr>
<tr>
<td>Total grants and subsidies (water supply)</td>
<td>64,685</td>
</tr>
<tr>
<td>Total grants and subsidies (water sanitation)</td>
<td>62,134</td>
</tr>
<tr>
<td><strong>Subsidies from apacanals to customers</strong></td>
<td>1,440</td>
</tr>
</tbody>
</table>
apakanals generate a lot of financial flows but...
make huge losses!
Various overheads are around 40% of the size of total sales
Possible reasons: there is a room for optimizing costs before considering tariff increase
possibly Infrastructure is oversized
collection rate improvement might help but not critical

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross profit</td>
<td>199,783</td>
</tr>
<tr>
<td>Other income, Distribution costs, Administrative expenses, Finance costs and costs of other economic activities, other expenses</td>
<td>-290,380</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>-90,597</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>6,052</td>
</tr>
<tr>
<td>PROFIT FOR THE YEAR</td>
<td><strong>-96,649</strong></td>
</tr>
</tbody>
</table>
Existing social measures

Water related social support systems in Moldova are underdeveloped. Until recently 20% of the population living below the poverty line. The main delivery mechanisms are below cost overall tariffs and investment support. Problems:

The delivery mechanisms that are there suffer from:

• Insufficient level of support of specific focus on the poor
• Ineffectiveness of the support mechanism
• Inefficient delivery of the support mechanism

Moldova’s GDP allows for a focus only on the lowest income quintile. It is therefore important to look both for water related social measures as well as for institutional structures that will warrant the interest of the very poor parts of the population.
WSS social measures in reference countries

WSS related social support measures are vastly different in each of the reference countries. Each of the reference countries provides for an approach.

Armenia: operating and capital expenditure subsidies to operators plus means tested general income support.

France “water pays for water” but hardship measures and investment support in rural areas.

Romania: Full focus on increasing coverage and connection rates. Supply oriented.

Ukraine: subsidising consumption through a combination of cross subsidies, operating subsidies, privileges and through the housing subsidy system. Costly to administer, hard to evaluate for the combination of low tariffs, discounts and reimbursements.
## Social support mechanisms. International practices

<table>
<thead>
<tr>
<th>Social support system</th>
<th>Moldova</th>
<th>Armenia</th>
<th>France</th>
<th>Romania</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Supply measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.1 Increasing connection rates (coverage) for WSS (through capital expenditure subsidy)</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td><strong>II. Tariff related measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.1 Conservation programs for poor (including leakage reduction) (such as in USA, Australia)</td>
<td>n/a</td>
<td>n/a</td>
<td>+</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>II.2 Reduced extent of full cost recovery (i.e. including environmental and resource costs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.2.1 Reduced recovery of operating costs (including depreciation) and costs of capital</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
<td>++</td>
<td>+++</td>
</tr>
<tr>
<td>II.2.2 Reduced consideration of resource costs</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>II.2.3 Reduced consideration of environmental costs</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>II.3 Extent of cross subsidisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.3.1 From other sectors to WSS</td>
<td>n/a</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II.3.2 From business and institutions to households</td>
<td>+++</td>
<td>+++</td>
<td>-</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>II.3.3 From higher income households to lower income households</td>
<td>n/a</td>
<td>-</td>
<td>++</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>II.4 Tariff structure or level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.4.1 Tariff structure</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II.4.2 Tariff choice</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II.4.3 Exemptions, ex ante rebates and discounts</td>
<td>n/a</td>
<td>-</td>
<td>-</td>
<td>n/a</td>
<td>+++</td>
</tr>
<tr>
<td><strong>III. Income support measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.1 Ex post tariff rebates and discounts</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>n/a</td>
<td>+++</td>
</tr>
<tr>
<td>III.2 Income assistance and vouchers</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>III.3 Other hardship initiatives</td>
<td>n/a</td>
<td>n/a</td>
<td>+++</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>III.4 Payment assistance, loans and arrear forgiveness</td>
<td>n/a</td>
<td>n/a</td>
<td>+++</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Approaches can be compared but there is no copy-paste. The challenge is to find the approach that works for Moldova.

The way forward is thus to:

1. Agree on what is the current situation;
2. Distinguish between temporary fixes and structural solutions;
3. Formulate realistic scenarios reflecting possible real developments;
4. Agree on which scenario would be optimal;
5. Define policy actions including risk mitigation measures.
Scenario analysis

The National Policy Dialogue has provided for the analysis for step 1 and step 2. Next are 4 scenarios for combinations of supply side and demand side measures. Scenarios will then be compared for their:

1. Institutional aspects, policy implementation feasibility and uncertainty
2. Social outcome
3. Economic and environmental outcome
Scenario A: No policy intervention

No clarification of legal and institutional framework
No progress on regionalisation of services
No changes in investment allocation process

Results in:
No systematic development of pro poor social measures
Struggling utilities
Drying up of funds for investments
Deteriorating services

The scenario is realistic, but the result is unacceptable.
Scenario B: All cards on water supply

Addressing social questions through increased investment and accessibility of services. Accessibility is put before affordability.

Foreign WSS investment (loan and grants) leveraged by optimized use of domestic funds

Drastic regionalisation of service.

Fast development towards cost recovery through income and cost measures.
Scenario B: Results

Rapid expansion in external finance.

After some years: Improved access and level of service

Drastic increase in tariffs without additional compensation measures beyond current instruments.

Staff optimisation measures and regionalisation mark a transition towards more commercially oriented utilities.

Ultimately: improved access to WSS, income generation and customer satisfaction
Scenario C: Framework for decentralized WSS measures

Stakeholders agree that social measures in WSS are important. They consider it up local government to develop optimal measures.

It could be a variety of supply, tariff related and income related measures, depending on whether the community is a small village a mid-size town or big cities.

Measures consists of roundtables and exchange of practises. A social measures toolkit is developed.

ANRE: tariff methodology cannot provide for any social tariffing.

Municipalities consider vouchers, support in debt rescheduling, temporary hardship relief and subsidies for water saving measures.

Scenario C: Results

Social measures in WSS are debated, but policies develop only in bigger cities.

Lack of budget to finance social measures.

Only cross subsidies are maintained as a ‘social measure’ despite

Flow of external finance stagnates because there is no further push to regionalisation and cost recovery.

Access to water and sanitation stagnates.

The supply side measures optionally have some effect but these are small compared to the social losses associated with lack of external finance for increased access.
Scenario D: Centralised WSS social measures

National pro poor program targeting the 20% lowest income quintile.

Covenants with Apacanals agreeing on investment support in exchange for increasing service areas, increasing access and regionalisation of operations.

ANRE monitors access and affordability of services for lower income groups, revenues and costs. Cross subsidies are abolished. Uniform affordability criteria of 5% of income in the service area.

The water tariff moves quickly towards full cost recovery. Improved transparency, access to information and administration of funds meant for investment. Component of tariff covering depreciation expense is to be used for maintenance and replacement.

Water abstraction and water pollution fee are implemented. They are used for funding investment in the sector with a focus on access to service.

Regional water utilities can take part in a social scheme aimed at poor households. Registered, means tested poor households are eligible for water related social measures, mainly in the form of a rebate on the bill and in support to get initial access to WSS services.

Optionally earlier mentioned supply side measures.
Scenario D: Results

Access to safe drinking water and sanitation improves. Because of the drastic increases in overall tariffs consumptions declines, putting further upward pressure on tariffs.

External finance accelerates mostly through loans from IFIs Apacanals commercialise as a result of debt service obligations, strict economic regulation and the duty to account transparently.

Optional added positive effects of earlier mentioned supply side measures.
Evaluation 1: Institutional

A: No policy intervention: (all too) easy to implement, result unacceptable

B: All cards on water supply: Viable, but it involves a more centralised approach to water supply

C: Framework for decentralised WSS social measures: Involves voluntary measures and cooperation amongst stakeholders. May fail because of lack of budget and genuine cooperation.

D: Centralised WSS social measures: Involves a technical challenge in defining financial and social policy as well as budget systems that are reliable
Evaluation 2: Social outcome

Scenario A fails to bring social benefits to the poor.

Scenario B can bring vast benefits but only through the supply side.

Scenario C may bring some supply side related benefits. But decentralised social measures risk lack of practical follow up.

Scenario D does provided solutions, but perhaps not the ones exactly needed at the local level. If the overall policy is good and allows for some local customisation it can bring substantial benefits to the poor.
Evaluation 3: Economic and environmental outcome

Scenario A: no acceptable outcome in this regard either

Scenario B: Substantial economic and environmental benefits to current and future generations alike.

Scenario C: Negative effect on external finance will wipe out benefits created by local stakeholder involvement.

Scenario D: Potentially as good results as Scenario B.
Conclusion on scenarios

Scenario A involving no policy intervention must be ruled out.

A fully decentralised approach to social measures involves the risk of an incoherent flurry of measures.

A pro-poor approach as in scenario D does not contradict per se a focus on economic and environmental results.

Social benefits of scenario D significant, but limited given the policy challenges.

Evaluation of scenarios involves subjective valuation and debate about weight of criteria. The Consultant provides framework for discussion. Each stakeholder makes own evaluation.
Conclusions: Social protection (1)

Moldova has a choice to adopt a mix of social measures in WSS consisting of supply related, tariff related and income related measures.

Supply related measures can be optimized generating more value for money, more focus on the poor and more leverage from international funding.

Tariff related measures need a shift from cross subsidization and low overall tariffs towards targeted pro poor measures such as supporting access and a rebate mechanism.

Income related measures require a broader social policy basis not confined to WSS only.
Conclusions: Social protection (2)

Experience from other countries provide insight in approaches, no blueprints to be copied.

Scenario analysis further highlights choices and consequences with respect to centralization of policy, regionalisation of operations, cost recovery, the need for external funding and targeted pro poor measures. Each scenario has advantages and drawbacks that may be perceived differently.

The one conclusion that stands is that no policy intervention is the worst conceivable outcome.

The Consultant’s evaluation shows the largest benefits in Scenario D (Centralised WSS social measures). However, there are risks with associated with centralized social policy development. This may induce some stakeholders to opt rather for Scenario B: All cards on water supply.
Thank You!

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Alpha Plus Consulting is a private advisory group established in 1999 by a team of independent economists to provide management and development consulting services and implement research in the areas of public policy and administration and infrastructure development, private sector development, improving enabling environment, regional and cluster development, market and industry research, productivity and competitiveness enhancement.

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