DELIVERABLE

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Best Practice Catalogue

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Contents

1 Executive Summary

This deliverable entitled 'Best Practice Catalogue' was prepared within the project ADAPT2DC. It aims at providing an overview of projects that have been established in order to adapt public social and technical infrastructure and services to demographic change. Since ADAPT2DC has a transnational approach the aim of this catalogue is to gather international examples concerning the possibilities of adapting technical and social infrastructures and services to demographic change and at the same time addressing the issue of cost saving. The presented examples may also support the realization of the planned pilot projects within the Consortium of ADAPT2DC.

This publication consists of four chapters:

- Chapter 1 summarizes the purpose of the document.
- Chapter 2 gives an introduction and overview of the structure of the Catalogue.
- Chapter 3 presents the collected best practices.
- Chapter 4 summarizes key points of the document.

2 Introduction

This Best Practice Catalogue presents a collection of international examples of projects that have been established in order to adapt public social and technical infrastructures and services to demographic change. The presented examples have been established in shrinking, but also in growing regions. The latter present projects that are dealing with the adaptation to an aging society with different demands and available resources. Hence, they also show possibilities how to adapt to demographic change in shrinking regions since these regions are also confronted with changing demands and available resources. Since ADAPT2DC is focussing on shrinking rural regions and cities the collected projects are either located in rural or urban regions.

One of the main aims of this catalogue is to support the pilot projects in the shrinking regions which will be realized within the project Consortium of ADAPT2DC. Therefore the project examples were mostly collected for those infrastructure and service areas in which the project partners are planning to realize their pilot projects. The following infrastructure and service fields have been covered: social service; health care; mobility and transport; public infrastructure; inter-communal cooperation. Additionally project examples from the fields of water provision and sewage treatment as well as entrepreneurship have been collected, although they are not realized as pilot projects. Since water supply and sewage treatment are a fundamental part of technical

infrastructure and entrepreneurship is an important issue for the communes in order to be economically competitive, they have been covered as well.

All the collected projects should have addressed the issue of cost efficiency and/or cost reduction. This was rather hard to realize. Although most of the projects offer possibilities to save costs the real cost savings were seldom measured directly. Nevertheless, it is indicated which possibilities to reduce costs the projects offer.

For the collection of the best practices an extended literature, internet and telephone based research was conducted. Additionally some of the project partners of ADAPT2DC delivered examples from their countries.

2.1 Structure Best Practice Catalogue

For the collection of best practices a template was developed. The following information had to be addressed during the collection:

- Type of infrastructure/service
- Name/title of the project
- Objective of the project
- Main activities of the project for the realization of the objective(s)
- Measurement of cost saving(s)? If yes, how was it measured and what were cost saving effects?
- Location of the project
- Provider/responsible of the project
- Further information and source

The catalogue's structure is oriented at the template. Hence, chapter 3 is structured the following:

3.1 Social Service

3.1.1 Name/title of the project

Objective of the project

Main activities

Measurement of cost savings/possible cost savings

Location of the project

3 Best Practices

The following section gives an overview of projects and initiatives that are dealing with the adaptation of technical and social infrastructures and services to demographic change, an aging society and new demands.

3.1 Social Service

In this section best practices from the social service sector are presented. In general they deal with aspects like developing services for the elderly, providing citizens with daily goods, shaping communication platforms. Social services is often one of the first sectors that suffers from the consequences of demographic change since the decrease of inhabitants leads to fewer incomes for the communes (Bartl 2011: 89). Additionally, the provision with social service is sometimes not perceived as absolutely necessary in comparison to health care or water provision. Often communes see only one way to cope with demographic change - cutting of expenditures through omitting voluntary offers in the area of social service, decreasing communal investment and cutting of jobs in administration (Lang/Tenz 2003: 122-123).

Nevertheless, communes can do something for keeping their social infrastructure amongst others through cooperation between public and private stakeholders for bundling of resources, realization of multifunctional facilities and a flexible organization within public facilities (Bartl 2011: 89-90). The following examples present such adaptations.

3.1.1 "Our Shop"

Objective: Developing a voluntary driven local supply system and usage of an abandoned building.

Main activities: When the last grocery shop was about to close, the citizens of Ochtrup established a cooperative with the aim to buy the old grocery shop and by that securing the local supply with daily goods. In less than five days 120 000 € were collected amongst the citizens and the cooperative was able to buy the shop. 95 % of the local population were involved; also citizens from surrounding municipalities hold shares on the cooperative. After the purchase of the old shop the building had to be refurbished. This was mainly realized by voluntary engagement of the citizens. On the ground floor a grocery shop and a café were established. In the first floor two apartments are available for rent.

Cost Savings: The project offers cost savings through the activation of voluntary engagement of the citizens and the applying of an alternative finance instrument (cooperative).

Location: Ochtrup/North Rhine-Westphalia, Germany

Provider/responsible: Volksbank Ochtrup eG, 48607 Ochtrup

hermann.lastring@volksbank-ochtrup.de, http://dorfladen-netzwerk.de/

Further information: Competition BMVBS "People and Success"

http://www.menschenunderfolge.de/beitraege-durchsuchen/alle-beitraege/alle-beitraege.html

3.1.2 DORV

Objective: Bundling of local and social services, usage of an abandoned building and establishing a central meeting point in the village.

Main activities: After the last grocery shop and the bank had closed, several citizens of Barmen and the surrounding municipalities decided to change something. Since it was clear that the public sector would not (be able) to fund the re-establishment of social services in Barmen, several citizens founded a cooperative. Within a few days they had collected the necessary budget, shares with a value of 70 000 € had been bought by the inhabitants. The money was mainly used for the sanitation of the abandoned bank building. Now the former bank offers groceries and several services such as a bank, a post office, regional administration offices and a health insurance office. For the groceries the providers initiated cooperation with regional wholesale groceries for a regional food supply and the support of regional food producers. The providers of the central village service centre also coordinate social and health care services for the Elderly, Disabled and families. Additionally the centre has become the central meeting and communication point in the village where all inhabitants come together. This helps to strengthen the identification with the village and supports the will of the inhabitants to stay in the village as long as possible and engage voluntary in the success of the centre.

Cost Savings: For municipalities this model offers several cost savings through the voluntary engagement of the citizens, the establishment of a cooperative and the bundling of services in one central place. Additionally the centre offers two full time jobs and four positions for marginally employed. It is lead voluntarily.

Location: Barmen/North Rhine-Westphalia, Germany

Provider/responsible: Heinz Frey, Prämienstrasse 49, 52428 Jülich, Tel.: + 49 (0) 2461 343 95 95,

frey@dorv.de

Jürgen Spelthann, Ludwigsallee 1a, 52062 Aachen, Tel.: + 49 (0) 241 430 32 82,

spelthann@dorv.de

Further information: Sächsische Staatskanzlei (2010): Den demografischen Wandel gestalten. Anregungen für die Praxis, p. 47-51

3.1.3 Hudson House Enterprise Centre

Objective: Bundling local services and providing a social meeting point.

Main activities: Hudson House Ltd is a community-led company set up to run and provide services from a number of organisations. The company takes care of the building and coordinates the provision of the village with local services. Partners that want to use the facilities of the house pay a licence fee that helps the Hudson House Ltd to be financially independent. The main activities and services of the Hudson House concentrate on four areas: community (internet access, printing, copying), business (in a separated building enterprises can set up their office temporarily with all the needed equipment and infrastructure such as internet access, e-mail account, mailbox), learning centre (wide range of training opportunities, locals don't to need to travel to bigger villages and towns; courses are offered a.o. for computer training) and consulting (in different areas such as travel, health and volunteering).

Cost Savings: Cost savings can be realized because the staff of the Hudson House covers all offered public services. Additionally it covers services of the local police station in form of a lost-property office. Income is guaranteed through the fees companies and organizations have to pay for using the facilities of the Hudson House. There are also two apartments available for rent.

Location: village Reeth/ Yorkshire Dales National Park, England/Great Britain

Provider/responsible: Hudson House, Reeth, Richmond, N. Yorkshire, DL11 6TB, Tel.: +44 (0) 1748884485, admin@hudsonhouse.info, http://hudsonhouse.info

Further information: komet-empirica, empirica (2008): Modellvorhaben der Raumordnung und Landesentwicklung in Sachsen - Optimierung der Infrastrukturangebote und Aufwertung der Lebensbedingungen in Regionen mit besonders starkem Bevölkerungsrückgang - Modellregion Oberlausitz-Niederschlesien, Handbuch Teil 3, p. 21-23

3.1.4 Community Centre SCHWALBE

Objective: Providing a city quarter with a central community centre for communication, events and social meetings; usage of an abandoned building.

Main activities: The city quarter of Greifswald where the community centre SCHWALBE is located is shaped by high unemployment and social segregation. In order to tackle related problems a neighbourhood management was installed and the inhabitants were involved in the planning of the community centre through open-space events. Here they could express their needs and wishes for the quarter. For the realization of these needs an abandoned child care day centre was refurbished. Cost intensive parts of the building were demolished and energy efficient concepts were introduced. The sanitation of the building was financed with the help of the German public-national funding programme "Socially Integrative City" and with donations of the citizens of Greifswald.

Cost Savings: Costs can be saved in the project through the efficient sanitation of unused infrastructure and the voluntary engagement of citizens. The costs for the realization of this project (2.2 Mio €) were funded by the national funding programme "Socially Integrative City". This programme was introduced 1999 by the Federal Ministry of Transport, Building and Urban Development (BMVBS) and the Federal States of Germany and aims at counteracting the widening socio-spatial rifts in cities. The programme fosters participation and cooperation and represents a new integrative political approach to urban district development.

Location: Greifswald/Mecklenburg-Western Pomerania, Germany

Provider/responsible: BauBeCon Sanierungsträger GmbH, Sylvia Tammert, Lange Straße 1/3, 17489 Greifswald, Tel.: +49 (0) 3834 79 73 0 Stammert@baubeconstadtsanierung.de

www.baubeconstadtsanierung.de

Quartiersmanagement Schönwalde II, Hauke Gollin, Caritasverband Region Vorpommern, Makarenkostraße 12, 17491 Greifswald, Tel.: +49 (0) 38348849945,

h.gollin@caritas-vorpommern.de, www.quartiersbuero.de

Further information: Programme "Socially Integrative City"

http://www.sozialestadt.de/praxisdatenbank/suche/ausgabe.php?id=638&

3.1.5 Community Care in the Commune of Lipinki

Objective: Ensuring the care and support for the Elderly living independently.

Main activities: The commune of Lipinki in Poland does not have its own care centre or nursing home. At the same time it is obliged to provide help for the Elderly and the Disabled. Although there was the possibility to "rent" places in care centres in other communes, the commune of Lipinki decided against it, because this solution would have been too expensive (700 - 1000 € per

person monthly). Additionally the Elderly would have been urged to leave their homes. Therefore the community decided to develop a less expensive solution that would allow assisting the Elderly/Disabled in their homes, so that they could stay in their familiar surrounding. Unemployed people were trained to be assistants of senior/disabled persons. In addition to standard assistance in everyday life, rehabilitation is provided.
Cost Savings: It is estimated that subsidizing the care of the Elderly in nursing homes would be more expensive for the commune than paying the staff involved in this initiative for all 23 participants.

Location: commune Gmina, Poland

Provider/responsible: The provider of the service is the community of Lipinki and it is operated within the frame of communal centres of social assistance.

Gminny Osrodek Pomocy Społecznej (Local Centre for Social Welfare), Katarzyna Ślusarz, Tel.: + 48 (0) 13 4477892, gopslipinki@interia.pl

3.1.6 Intergeneration house "Fruits of Society"

Objective: Setting up an intergeneration house for bringing together different groups of society and activities.

Main activities: The centre was opened in 2009 and is located near the local schools, a library, a park and a home for the Elderly which makes it easy accessible to the target groups. The programme of the intergeneration house targets especially the youth and the Elderly. The intergenerational programmes offered in the house are designed to meet the needs and abilities of older as well as younger generations. Special emphasis is put on the intergenerational exchange of knowledge and experiences and lifelong learning. The activities of the house include different workshops like pottery, ceramics, theatre and cooking.

Cost Savings: The programme of the house is mainly based on voluntary work. Also the local schools involve their pupils to work voluntarily in the house which leads to positive changes: The children feel stronger connected with their commune, develop self-confidence and responsibility. At the moment the house plans to develop social services in order to become a social enterprise that allows the creation of additional income for the house.

Location: Murska sobota, Slovenija

Provider/responsible: Slovenska filantropija, Združenje za promocijo prostovoljstva (humanitarian organization Slovene Philantrophy) http://www.filantropija.org/en/

Further information: http://hisa.sadezidruzbe.org/

3.1.7 Village Shop Allgaeu Krugzell

Objective: Ensuring the local grocery supply and preventing the decay of the village centre.

Main activities: When the only grocery shop in Krugzell was closed a concept was developed in order to guarantee its citizens the supply with groceries. The project idea was integrated into the funding programme of the European Union, LEADER +. The village shop was financed by LEADER + (12 986 €) and by the citizens of Krugzell who could buy share certificates. By that they are not only financially, but also emotionally involved in the project. The shop was opened in 2004 and has been very successful amongst others by offering mostly regional products, using regional networks, creating jobs (11) and establishing a social meeting point in the shop. The shop is lead voluntarily.

Cost Savings: The total costs for opening the village shop were 54 218 €. 12 986 € were financed by LEADER +. The rest of the money could be obtained from the citizens by handing out share certificates. Costs can be saved because the citizens are involved financially and emotionally into the planning and realization of the village shop which leads to a positive yearly turnover. Also the voluntary engagement of the manager contributes to the success of the village shop.

Location: Altusried/Bavaria, Germany

Provider/responsible: Markt Altusried, Rathausplatz 1, 87452 Altusried

Further information:

http://www.netzwerk-laendlicher-raum.de/beispiele/projektdatenbank/?no_cache=1&regionId=170&projektId=253&subMenuNavigationOn=0&aktion=details&id=713&bundeslandId=3

http://www.altusried.de/

3.1.8 Dual network infrastructure for the Elderly

Objective: Establishing dual network infrastructure and supporting voluntary engagement for improving the provision with social infrastructure for the Elderly.

Main activities: The networking of regional competences and the linkage between voluntary engagement and professional work were central parts of this project. This could be realized amongst others through the establishment of a network of the Elderly and the development of a general principle. Therefore a website was developed that functions as information and communication platform; additionally the public and political level were sensitised for the significance of establishing networks for improving the provision of the Elderly in the communes. Another central instrument was the installation of a regional coordination office. It is responsible for initiating projects related to the maintenance of network infrastructure and the support of voluntary engagement, for the fostering of the networks and the passing on of information within the network. The project showed that it is important to qualify, supervise and award those citizens who are voluntary engaged.

Cost Savings: The project neighbourly help can be seen as a new, practically oriented provision model on communal level which helps to reduce costs for the society. The project was part of

"MORO - Modellvorhaben der Raumordnung", a programme of the Federal Ministry of Transport, Building and Urban Development (BMVBS) for testing and realizing innovative spatial planning approaches together with stakeholders from practice and the sciences. The programme was realized by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the Federal Office for Building and Regional Planning (BBR).

Location: Neumarkt i.d. Oberpfalz /Bavaria, Germany

Provider/responsible: Landkreis Neumarkt i.d.OPf. (project leader)

responsible at BBR: Martin Spangenberg, martin.spangenberg@bbr.bund.de

Further information: MORO

http://www.bbsr.bund.de/cln_032/nn_484888/BBSR/DE/FP/MORO/Forschungsfelder/InnovativeProjekteRegionalentwicklung/Modellvorhaben/InfrastrukturUndDemographischerWandel/AufbauDualeNetzwerkstrukturen/AufbauDualeNetzwerkstrukturen.html?__nnn=true

3.2 Health Care

Although the number of inhabitants is likely to decrease further in the coming years in regions that are shaped by demographic change in CEE, the demand of health care will increase in the future due to higher life expectancy (Gans/Leibert 2007; Steinführer/Küpper 2011). At the same time the provision with health care is problematic in declining regions because doctors have to take care of more and more people living on a greater territory. If doctors are retiring they have problems finding successors for their practices. And the communes dispose over less and less money to secure health care. This situation makes it rather unattractive for young doctors to settle in rural areas. The population therefore needs to have access to health care in the next biggest agglomeration. Hence, the issue of health care provision is closely connected to the issue of mobility and transport. The following best practices present examples of possible adaptation of health care to demographic change. In general these are based on creating synergy effects and using methods of telemedicine that help to reduce costs.

3.2.1 Mobile Dentist

Objective: Offering emergency and acute treatment, prophylaxis and social integration.

Main activities: The mobile dentist offers her service once a week additionally to the normal opening hours of her dental practice. For the realization of this service a specially equipped car had to be installed.

Cost Savings: The costs for the installation of the mobile dentist car were funded by the Federal State of Brandenburg (4.443 €) and by ELER, the European Agricultural Fund for the Development of Rural Regions (17.773 €). Although the service creates costs in the first place due to the

conversion of a normal car into a mobile dentist practice, the service of the mobile dentist helps to avoid costs in a long term for extended treatments due to preventive checkups.

Location: Templin/Brandenburg, Germany

Provider/responsible: Dr. med. Kerstin Finger, Dargerstdorfer Str. 11, 17268 Templin, Tel.: + 49 (0) 3987 6218

Further information: competition BMVBS 2011 "People and Success"

http://www.menschenunderfolge.de/beitrag.html?frame=../../db/frontend.php/api/detail/id/751

http://www.eler.brandenburg.de/sixcms/detail.php/492304

3.2.2 Ambulatory Health-care Centre

Objective: Securing medical care provision in rural areas through bundling services and decreasing fix costs.

Main activities: The Healthcare Centre is organized as a Ltd., the City of Lübbenau is the sole shareholder. The Centre disposes over eleven employed doctors and three resident doctors. For a more efficient organization, the doctors are using electronic health records. The Centre consists of nine medical practices, a pharmacy, shops for orthopaedic shoes and hearing aids.

Cost Savings: The Centre offers several cost saving options: the employed doctors share the electronic instruments. One central management is responsible for all practices and related administrative duties like purchase, bookkeeping and data protection. By that fix costs can be decreased and the financial risks for the doctors are minimized. Another feature of the centre is the employment of specially trained nurses that conduct house calls and by that relieve the doctors in their daily work.
Location: Lübbenau/Spree Forest/Brandenburg, Germany

Provider/responsible: Medizinisches Zentrum Lübbenau, Karin Linke (chief executive), Robert-Koch-Straße 42, 03222 Lübbenau, Tel.: + 49 (0) 3542 8710, K.Linke@mzl-gmbh.de

Further information: komet-empirica, empirica (2008): Modellvorhaben der Raumordnung und Landesentwicklung in Sachsen - Optimierung der Infrastrukturangebote und Aufwertung der Lebensbedingungen in Regionen mit besonders starkem Bevölkerungsrückgang - Modellregion Oberlausitz-Niederschlesien, Handbuch Teil 3, p. 64

www.mzl-gmbh.de

3.2.3 TelLappi

Objective: Securing health care in remote areas, increasing and utilizing new technologies, creating integrated infrastructure and realizing cost efficiency.

Main activities: This project, which lasted from 2001 to 2007, was implemented by the Lapland Hospital District. Additionally all 15 municipal health centres of the region were involved. In the course of the project several measures were introduced such as video conferencing, electronic referral system and the long-term storage of images. For the video conferencing all health centres and some special fields of the hospital district were equipped with PC, web camera and microphone. Training lessons were organized for the staff. The video conferencing was introduced especially for consultation services. If the patients need a consultation with a specialized physician in the hospital, they go to the next health centre and are being connected with the doctor via videoconference. For the long-term storage of images the project invested into the digitalization of x-ray images. Within the project, also the data protection and security solutions of the involved municipalities were improved for a safe storage of patient information. Through the implementation of the aforementioned instruments a compatible infrastructure was built and cost savings could be realized.

Cost Savings: The total costs for the project were 2 210 591 €. These costs were covered by EU- and national funds (ERDF and national share were 1 232 074 €) and the involved municipalities (978 517 €). The highest expenditures were caused by the investments into the hardware and the software programmes. Especially the introduction of video conferences among the doctors and patients revealed cost saving options. Because travelling is expensive in Lapland due to large distances, around 400 € per appointment can be saved. The digital storage of x-ray images revealed savings due to less storage costs.

Location: Lapland, Finland

Provider/responsible: Leena Varesmaa-Korhonen, Specialist in General Health Practice, Centre Doctor, Pailakantie 17, 99800 Ivalo, leena.korhonen@inari.fi

Further information: Liimatta, Sirpa; Paananen, Tellervo (2007): TEL LAPPI III. From technological initialization to the development of services, http://www.lshp.fi

3.2.4 Securing Medical Provision in Rural Areas

Objective: Securing the medical provision in rural areas, activating the local population and improving communication.

Main activities: The commune of Beilrode installed two additional practices in communal properties in the surrounding villages of Beilrode. These are connected with the central practice in Beilrode. Here, the doctors have access to the data pool of the main practice and offer the supply with medicine and basic medical checkups. The new practices are being accepted well by the local population and are also functioning as central communication places.

Cost Savings: Cost savings can be realized through the creation of an efficient system of medical provision and prevention of unnecessary travels of doctors and patients.

Location: Beilrode/Saxony, Germany

Provider/responsible: Gemeinde Beilrode, 04886 Beilrode, gemeinde@beilrode.com

Further information: competition BMVBS 2012 „People and Success“

http://www.menschenunderfolge.de/wettbewerb-2012/aktuelle-beitraege/beitraege-2012.html

3.2.5 Family Doctor Academy

Objective: Attracting young doctors to work in rural areas as family doctors and by that tackling the issue of providing health care in shrinking regions.

Main activities: In the district of Hersfeld-Rothenburg an Academy for family doctors was established by the clinics, practices and the Hessian association of family doctors. The concept involves a mentoring programme for students of medicine and young family doctors. The students are in close contact with their mentors, already established family doctors in the regions. They give advices concerning special advanced training courses and the leading of a practice for family doctors.

Cost Savings: Costs can be saved on a long term through the installation of an efficient system of medical provision and the avoiding of additional costs for travel of doctors and patients by attracting young doctors to work in rural areas.

Location: Hersfeld-Rothenburg/Hesse, Germany

Provider/responsible: Anja Csenar, Friedloser Straße 12, 36251 Bad Hersfeld, Tel.: +49 (0) 6621 87228, anja.csenar@hef-rof.de, http://www.hef-rof.de

Further information: Service Agency for Demographic Change

http://serviceagentur-demografie.de/ideenboerse/projekt/hausarztakademie-hersfeld-rotheburg.html

3.2.6 SOS - Mobile Medical Emergency Supply

Objective: Providing medical emergency help in rural areas around the clock.

Main activities: For the mobile medical emergency supply a private and independent organization that consists of doctors that cover all disciplines was established. The doctors have no medical practices, they treat the patients on site. A switchboard staffed with doctors coordinates the supply and is available for medical and logistical questions. A data bank collects all patient information.

Cost Savings: Costs can be saved through efficient organisation and outsourcing of public services to private agents.

Location: Zurich, Switzerland

Provider/responsible: SOS Ärzte Turicum AG, Weinbergstraße 68, CH-8006 Zürich, Tel.: +41 (0) 44 3604 410, info@sos-aerzte.ch, http://www.sos-aerzte.ch/www/index.php?pg=0

Further information: komet-empirica, empirica (2008): Modellvorhaben der Raumordnung und Landesentwicklung in Sachsen - Optimierung der Infrastrukturangebote und Aufwertung der Lebensbedingungen in Regionen mit besonders starkem Bevölkerungsrückgang - Modellregion Oberlausitz-Niederschlesien, Handbuch Teil 3, p. 65

3.3 Transport and Mobility

A functioning transport system is especially important in shrinking regions where part of the needed infrastructure and services cannot be offered anymore. Therefore a good connection to the next town is fundamental. But since passenger numbers are decreasing in declining regions alternative forms of mobility and transport have to be developed, like carpools. By that costs can be saved because all passengers share the costs and people who do not dispose over a car are enabled to stay mobile, even in declining regions where the public transport is increasingly being cut down (Steinrück/Küpper 2010: 55). Another system that can help to improve and secure the mobility of people living in shrinking regions are citizen busses that are organized and led voluntarily by the citizens, sometimes supported by their communes. Although citizen busses cannot substitute the public transport system completely they are an important supplement to it. They help to secure the mobility of people who are living in shrinking regions. Since the communes and municipalities have less and less money to provide a complete public transport and/or all necessary social and health care services, the support and partly funding of models such as citizen busses are an important instrument for those regions that are marked by shrinkage to stay competitive in the future. Nevertheless, one central problem is that the communes and municipalities depend on voluntary engagement when transferring former public duties to the citizens.

3.3.1 Citizen Bus Gransee

Objective: Securing and improving the mobility of citizens in rural areas and providing access to social and health services.

Main activities: For the installation of a citizen bus in the municipality of Gransee an association was founded and close networks with the regional public transport provider, the administration and communes of Gransee and the City of Zehdenick were established. In December 2011 the citizen bus was introduced, funded by the Federal State Brandenburg. The public transport provider and the district plan the routes and the timetables; the ticket system of the public transport provider is extended to the citizen bus. Users can use the same tickets for the public and the citizen's bus. The association takes care of the provision with drivers. Voluntary drivers drive the bus four times a day.

Cost Savings: Cost saving can be realized through the activation of voluntary engagement and inter-communal cooperation. Through the additional mobility offer the municipality of Gransee does not have to offer all social and health services. The costs are also split between the involved partners. It is calculated that citizen bus associations need yearly subsidies between 15 000 and 20 000 € for providing its service. Costs for marketing, ticket printing and planning of the timetables and routes are paid by the regional public transport provider. The costs for the purchase of the bus are funded by the Federal State of Brandenburg.

Location: municipality Gransee/Brandenburg, Germany

Provider/responsible: BürgerBusVerein Gransee e.V., Lärchenweg 2, 16775 Gransee OT Dannenwalde, Tel.: + 49 (0)3308570 421, buergerbus-gransee@clever.ms

http://www.buergerbus-gransee.de/

Further information: Handbuch BürgerBus (2012),

http://images.vbb.de/assets/downloads/file/8014.pdf

3.3.2 Village Mobile

Objective: Securing and improving the mobility of citizens in rural areas.

Main activities: The village mobile was introduced in 2002 and since then runs flexible and demand-based. People who would like to use the bus have to call the driver of the bus half an hour in advance. The stops of the village mobile have been integrated into the public transport system which prevents additional costs and connects the village mobile with the existing but insufficient public transport. Voluntary drivers drive the bus from Monday to Friday, from 6 a.m. until 7 p.m.

Cost Savings: Cost saving is given through the activation of voluntary engagement, the integration into the public transport system and inter-communal and -organisational cooperation. In the first year, when the village mobile was introduced the costs were around 25 000 €, in the following years the costs dropped to 15 000 €. The costs are being covered through member fees for the association, events, donations, the sold tickets and subsidies from the Federal State of Upper Austria. Additionally the introduction of the village mobile was integrated into the EU-Project ARTS and by that obtained 22 000 €. For the following years it was agreed that the Department of the Federal Government of Upper Austria will cover 50 % of the expenses.

Location: municipalities Klaus, Steyrling, Kniewas/Upper Austria, Austria

Provider/responsible: Verein Dorfmobil KSK, 4564 Klaus an der Pyhrnbahn 100, Tel.: + 43 (0) 7585 25513, info@gemeinde-klaus.at,

http://www.gemeinde-klaus.at/gemeinde/DorfmobilWeb/Verein.htm

Further information: Meth, Dagmar (2003): Verkehrsversorgung dünn besiedelter Räume in Österreich - das Projekt Dorfmobil, in: BBR (Hrsg.): Demographischer Wandel und Infrastruktur im ländlichen Raum - von europäischen Erfahrungen lernen, Informationen zur Raumentwicklung, Heft 12/2003, p. 745-749

komet-empirica, empirica (2008): Modellvorhaben der Raumordnung und Landesentwicklung in Sachsen - Optimierung der Infrastrukturangebote und Aufwertung der Lebensbedingungen in Regionen mit besonders starkem Bevölkerungsrückgang - Modellregion Oberlausitz-Niederschlesien, Handbuch Teil 3, p. 189

ARTS-Project http://www.rural-transport.net/

3.3.3 Citizen Bus Ringgau

Objective: Connecting social services and public transport with the help of an individually and voluntarily introduced transport system.

Main activities: The citizen bus Ringgau was introduced in November 2011 and presents an additional offer to the public transport. The providers of the citizen bus are the involved communes, Ringgau and Weißenborn. They are supported by the association of a shopping mall that profits from the citizen bus and which is organizing the drivers and the routes. 23 citizens are voluntarily driving the bus twice a week on fixed times and routes. These are connecting the municipalities and its social services and infrastructures. The usage is for free.

Cost Savings: The created synergies between the communes, the shopping mall and volunteers help to save costs for the public transport.

Location: municipalities Ringgau and Weißenborn/Hesse, Germany

Provider/responsible: Klaus Fissmann, mayor Ringgau, Tel.: + 49 (0) 5659 97970,

klaus.fissmann@ringgau.de

Further information: Bundesministerium für Verkehr, Bau und Stadtentwicklung (2012): Region schafft Zukunft - Ländliche Infrastruktur aktiv gestalten, p. 29

http://www.region-schafft-zukunft.de/cln_032/sid_29295C0529D5B3D76F1471BA0FAB6195/DE/Home/homepage__node.html?__nnn=true

3.3.4 CARLOS

Objective: Connecting the public transport system with the individual transport and by that securing mobility and access to relevant services and infrastructures.

Main activities: CARLOS is a spontaneous car passenger system without registration. At digital columns that are integrated into the stops of the public transport system people can enter their

destination and purchase a ticket. The destination is clearly visible for drivers who pass by. The driver who is willing to pick up the waiting passenger receives the ticket which can be exchanged at gas stations or the public transport agency. Then the driver receives half of the ticket price. For safety reasons CCTV of the columns and insurances for drivers and passengers were introduced.

Cost Savings: Reduction of costs for drivers and users as well as for communes while integrating the commuter service into the public transport system. While connecting the public transport with this spontaneous car passenger system the provider can extend its mobility offer and will be more attractive, especially in disperse populated regions.

Location: CARLOS was tested in Burgdorf, Switzerland

Provider/responsible: CARLOS GmbH, Martin Beutler, Muristrasse 79, CH-3006 Bern, Tel.: +41 (0) 31 333 45 17, martin.beutler@carlos.ch, http://www.carlos.ch/index.html

Further information: Steinrück, Barbara; Küpper, Patrick (2010): Mobilität in ländlichen Räumen unter besonderer Berücksichtigung bedarfsgerechter Bedienformen des ÖPNV, p. 55

3.3.5 Stop by Need

Objective: Avoiding redundant public transport and by that saving costs.

Main activities: Especially in shrinking and disperse populated regions the public transport has long and sometimes redundant driveways. In order to make the public transport more efficient request stops were introduced. Here the passengers have to press a button in order to signal the bus driver that they whish to use the bus and the driver includes the stop in his route. By that the public transport becomes more effective and has capacities in order to extend its offer.

Cost Savings: The avoiding of redundant transport can help to reduce public expenditures and allows an extension of the transport offer. This might lead to an increased income for the providers.

Location: district Dahme-Spreewald/Brandenburg, Germany

Provider/responsible: Regionale Verkehrsgesellschaft Dahme-Spreewald mbH, Geschäftsleitung und Niederlassung Luckau, Nissanstraße 7, 15926 Luckau, Tel.: +49 (0) 3544 5001 0, info@rvs-lds.de, http://www.rvs-lds.de/

Further information: Service Agency Demography

http://serviceagentur-demografie.de/ideenboerse/projekt/bedarfshaltestelle.html

3.3.6 School Transport in Rural Areas

Objective: Maintaining the school bus and connecting it with public transport and social services.

Main activities: When the school transport was about to be shut down, the school and the local authorities of Mildstedt bought the bus that is being driven by the full-time employed caretaker of

the school. He drives the bus every week day and by that connects three villages of the commune. Additionally the school bus is available as a public transport bus. Citizens who would like to use the bus call the bus driver and he includes them into his route. This helps to secure the accessibility to social services and infrastructures in the region.

Cost Savings: Costs can be saved through the bundling of services, cooperation and an efficient organization of the school bus.

Location: Mildstedt/Schleswig-Holstein, Germany

Provider/responsible: Schulverband Witzwort, 25866 Mildstedt

b.schubert@amt-nordsee-treene.de

Further information: competition BMVBS 2012 “People and Success“

http://www.menschenunderfolge.de/wettbewerb-2012/aktuelle-beitraege/beitraege-2012.html

3.3.7 RUTO

Objective: Using capacities in school busses and integrating them into the public transport system.

Main activities: The pilot project RUTO integrates free capacities in school busses into the regular public transport system. For that new stops were introduced and combined with existing stops of the public transport. Thirteen RUTO school bus lines with stops in 36 villages are accessible to all passengers. In the morning the school busses collect the pupils in the villages and offer also other passengers a ride to the three surrounding main towns. In the evening passengers can use the school busses for their ride home.

Cost Savings: Costs could be saved through creating synergies and an efficient organisation. The state has to pay for the public school transport that is secured by a local supplier. By making the school busses also accessible to other passenger groups the capacities of the school busses can be used which helps to save costs for the provision with public transport. It also helps to keep social infrastructures and services accessible.

Location: three municipalities in Ourense/Galicia, Spain

Provider/responsible: Xosé Inacio Palomanes Rodriguez, Servicio Provincial de Transportes de Ourense, Rúa Curros Enriquez n 1 Estrechán, 32003 Ourense, Tel.: +34 (0) 988372 006

Further information: ARTS (2004): Öffentlicher Personennahverkehr im ländlichen Raum. Handbuch, p. 38-39

http://www.rural-transport.net/handbook/ARTS_HB_german.pdf?sprung1=handbook%2FARTS_HB_german.pdf

komet-empirica, empirica (2008): Modellvorhaben der Raumordnung und Landesentwicklung in Sachsen - Optimierung der Infrastrukturangebote und Aufwertung der Lebensbedingungen in

Regionen mit besonders starkem Bevölkerungsrückgang - Modellregion Oberlausitz-Niederschlesien, Handbuch Teil 3, p. 196

3.3.8 Samkom

Objective: Coordinating the public transport in rural areas, bundling of budgeting and administration of the public transport system.

Main activities: To reach the above mentioned objectives minibuses and cabs were introduced by the regional administration. The routes of the busses and cabs connect public social infrastructure and are combined with the existing public transport system that connects the surrounding villages with the main municipality on the Island, Visby. Mostly older people who are living in rural areas on the island are using the additional traffic offer in order to reach social and health care infrastructures and services in the main towns on the island.

Cost Savings: Fix costs could be decreased through a more efficient and coordinated transport system. By that the number of connections and passengers increased which lead to higher income.

Location: rural regions on the Isle of Gotland, Sweden

Provider/responsible: P G Andersson Lena Fredriksson, Trivector Traffic AB, Åldermansgatan 13, 227 64 Lund, Tel: +46 (0) 46 386537, http://www.trivector.se

Further information: ARTS (2004): Öffentlicher Personennahverkehr im ländlichen Raum. Handbuch, p. 42-43

http://www.rural-transport.net/handbook/ARTS_HB_german.pdf?sprung1=handbook%2FARTS_HB_german.pdf

3.3.9 New Public Transport Concept

Objective: Introduction of a new public transport concept in a rural area.

Main activities: The public bus transport system of the shrinking district of Altmark was reformed in order to make it more attractive and by that creating additional income. A new, more effective network of routes was introduced. The busses run every second hour from Monday till Sunday until 10 pm. Bikes can be carried along for free and a flexible fare system was introduced. The latter make the public transport also more attractive for tourists. Additionally, tourist routes were included in the routes of the public bus transport system. Since 2012 the company is also involved in a project that transports children to their kindergarten. The introduced changes have made the public transport of the Altmark district attractive for new user groups.

Cost Savings: Cost savings can be realized through the creation of additional income. Between 2007 and 2011 the yearly passenger numbers increased from 2 800 to 80 000.

Location: Salzwedel/Saxony-Anhalt, Germany

Provider/responsible: PVGS Personenverkehrsgesellschaft, Altmarkkreis Salzwedel mbH & IGZ, 29410 Salzwedel, riehn@pvgs-salzwedel.de

Further information: competition BMVBS 2012 "People and Success"

http://www.menschenunderfolge.de/wettbewerb-2012/aktuelle-beitraege/beitraege-2012.html

3.3.10 Adaptation of Public Transport Service

Objective: Saving costs for public transport a response to demographic change.

Main activities: The public transport of the rural district of Chomutov in the Czech Republic was reformed due to demographic changes which lead to fewer incomes for the involved communes. This included changes of the traffic schedule, a decreased number of traffic channels and the usage of low-capacity vehicles. The efficiency of the public transport could be improved, especially those of the bus services.

Cost Savings: Cost savings could be realized amongst others by a higher efficiency of the public transport and a reduction of connections from 16 to 13.

Location: district of Chomutov, Czech Republic

Provider/responsible: Regional Authority of Usti Region, Velka Hradebni 48, 40001, Tel.: + 0420 475 657 111, urad@kr-ustecky.cz

Further information: Department of Transportation, Regional Office of Authority of Usti Region

3.4 Public Infrastructure

The adaptation of public infrastructure to demographic change is often concerned with reducing, re-using and condensing the existing public infrastructure stock. In this section the examples mainly refer to public building, such as dwellings or schools. Another issue that comes to the fore in recent years is realizing energy savings in public infrastructure. This also offers cost saving possibilities for the public budget.

3.4.1 Reduction of Public School Stock

Objective: Reducing the public school stock and decreasing public budgets.

Main activities: Two school buildings were demolished and its pupils were integrated into an existing full-time school in the same quarter. The abandoned area of the former school buildings was converted into a community site that offers space for playing, communicating and meeting. The demolishing and building of the community site was realized with the help of municipal funds and national funding from the programme "Stadtumbau-West" (Urban Restructuring in West Germany). This urban restructuring programme was initiated by the German Federal Government and the state governments in 2004. The objective of the programme is to find ways to react to the

challenges of urban regeneration and urban development generated by demographic and economic structural change. So far 401 cities and local authorities in West Germany are taking part in the urban restructuring programme “Stadtumbau West”. Between 2004 and 2011, the subsidies given by the Federal Government within the urban restructuring programme amounted to almost 490 million Euros. The programme “Stadtumbau West” was supplemented by the programme “Stadtumbau Ost” that has similar aims like “Stadtumbau West”. The supplied budget by the national state, the federal states and the municipalities between 2002 and 2009 is 2.7 billion Euros.

Cost Savings: The demolition of the two school buildings is 6 million € less expensive than the sanitation would have been. Additionally yearly overhead costs of 250 000 € can be saved through the bundling of three schools.

Location: Bremerhaven-Lehe/Free Hanseatic City of Bremen, Germany

Provider/responsible: Norbert Friedrich, norbert.friedrich@magistrat.bremerhaven.de

Further information: ExWoSt-Forschungsfeld Stadtumbau West

http://www.stadtumbauwest.de/exwost/newsletterdaten/Schulen.pdf

http://www.staedtebaufoerderung.info/cln_031/nn_512358/StBauF/DE/UeberDieStBF/UeberDieStBF__node.html?__nnn=true

3.4.2 Renovation of historical centre of Tržič

Objective: Revitalization of the historical centre of the commune of Tržič in order to raise the social, cultural and economic attractiveness of the commune.

Main activities: Renovation of the historical infrastructure of the historical city centre. This included the sanitation of streets, water supply infrastructure and public lighting. The renovation of the old city centre of Tržič raised the quality of living in the commune.

Cost Savings: The renovations were funded by municipal and EU funds. The project gave general added value to the quality of living and raised the potential of economic aspects of "using heritage". The revitalised city centre motivates people to stay in the city and enables cultural, tourist, demographic and economic development of city.

Location: Tržič, Slovenia

Provider/responsible: commune of Tržič, Slovenia

Further information: http://www.trzic.si

3.4.3 Reduction of Public Dwelling Stock

Objective: Developing strategies for the reduction of no longer needed public dwelling stock with the aim to reduce costs and adapt to demographic change.

Main activities: Within the framework of the ExWoSt research field "Stadtumbau West", a programme initiated by the German Federal Government that promotes studies, research and pilot projects in the area of urban restructuring, several strategies were tested and applied in seven pilot regions that shall help to reach the main objective of this project: reducing the public dwelling stock and adapting the public infrastructure to demographic and economic developments. One strategy was the demolition of not needed public dwellings, accompanied by image strategies for the involved city districts in order to retain and/or attract new inhabitants. The new, free spaces were used for the creation of green areas. Remaining houses were sanitised energetically and optically through new, glazed lifts in order to make the city quarters more attractive for remaining and new inhabitants.

Cost Savings: The costs for the reduction depend on the used method, reducing whole blocks is less expensive than their partly reduction. The demolition of houses costs between 40 and 60 € per square metre.

Location: Albstadt/Baden-Wurttemberg, Bremen-Osterholz-Tenever/Free Hanseatic City of Bremen, Lübeck-Buntekuh/Free Hanseatic City of Lübeck, Oer-Erkenschwick/North Rhine-Westphalia, Salzgitter/Lower Saxony, Selb/Bavaria, Wildflecken/Bavaria, Germany

Provider/responsible: contact persons in the pilot regions (see homepage http://www.stadtumbauwest.de/exwost/pilotstadt.html)

Research Agency (Tel.: + 49 441-9805922, info@forum-oldenburg.de)

Further information: ExWoSt-Forschungsfeld Stadtumbau West

http://www.stadtumbauwest.de/exwost/inhalte/Guter_Ansatz_Rueckbaumanagement.pdf

http://www.bbsr.bund.de/BBSR/DE/FP/ExWoSt/exwost__node.html

3.4.4 Revitalisation of the City Centre

Objective: Concentrating services for the Elderly in the city centre; developing inner urban abandoned areas and realising technical solutions for the support of the Elderly.

Main activities: The revitalisation of the old city centre of Guestrow was realized with the help of national and federal funds. They were used for buying an abandoned area and constructing a quarter for the Elderly there. The new centre contains apartments, a community building and service facilities. Short distances between the social facilities lead to a higher mobility of the Elderly and by that support an autonomous lifestyle.

Cost Savings: Since the revitalised city centre motivates especially the Elderly to move into this area not needed infrastructure can be demolished and social services bundled. Additionally the Elderly are supported by leading an autonomous and active lifestyle which helps them to stay longer independent and healthy. All these points help to save public spending on the long term.

Location: Güstrow/Mecklenburg-Western Pomerania, Germany

Provider/responsible: Hollstraße, 18273 Güstrow, Mecklenburg–Vorpommern

Further information: http://www.stadtumbau-ost.info/

http://www.baumodelle-bmfsfj.de/Baumodelle/33_Guestrow/33_Guestrow_F.html

3.4.5 "Poessneck is coming back"

Objective: Image and revitalisation campaign for the attraction of new residents.

Main activities: Since reunification the City of Poessneck has lost more than one third of its population. Today, 13 000 people are still living in the city. At the same time the average age of the population is increasing. Especially in the city centre the negative population development is visible - for example in form of empty and decayed houses. In order to prevent a (further) downward spiral the City of Poessneck has developed an (image) campaign for making the city more attractive for the (new) residents. The measures include the upgrading of brownfields through interim solutions like greening of these areas; cataloguing of inner-city properties with precise information and suggestions for future usage; building of town houses on central brownfields for the revitalisation of the inner-city; campaign for students of Jena in order to convince them to live in Poessneck since Jena disposes over high rents due to a dense housing market.

Cost Savings: The campaign of the City might contribute to the attraction of new residents that will help to tackle the consequences of demographic change and thus can help to save costs in the long term. Some of the (planned) projects are funded publicly, like the revitalisation of an inner-city brownfield in Poessneck with support by the Federal State's initiative *Genial zentral*. This funding programme uses already existing ones and tries to bundle all activities that deal with adaptation of public infrastructure to demographic change.

Location: City of Poessneck/Thuringia, Germany

Provider/responsible: City of Poessneck, Rathaus Markt 1, 07381 Pößneck, Tel.: + 49 (0)3647 5000

Further information: Stiftung Schloss Ettersburg

http://www.stiftung-ettersburg.de/aktivitaeten/projekte/poessneck/

Genial zentral

http://www.thueringen.de/de/genialzentral/

3.4.6 Centre of Culture and Leisure for Senior Citizens

Objective: Further usage of an abandoned school canteen, provision of professional help for the Elderly, disabled and low-income citizens in form of day-care, individual and group therapy, rehabilitation for senior citizens and cultural offers.

Main activities: The Centre is located in Nowa Huta, a district of Krakow, where 27 % of the inhabitants are older than 60. The main activities of the Centre are rehabilitation, occupational therapy, music therapy, art workshop, memory training and cultural events.

Cost Savings: The building where the Centre is located is a former school canteen. In the 1960s and 1970s the canteen was providing daily meals for 1500 students. When the number of students using the canteen decreased the City decided to refurbish the building and create a day-care Centre for Senior citizens. The Centre is regularly attended by more than 250 senior and disabled people. The canteen offers meals for up to 280 people. When needed, the canteen provides catering for other Homes of Social Assistance in Krakow. The event hall can accommodate 250 people. The building is used in an efficient way and performs an important function for the local community.

Location: City of Krakow, Poland

Provider/responsible: The Centre of Culture and Leisure for senior citizens is a public institution and the City of Krakow provides the budget for it. The centre operates as a social assistance unit in the frame of municipal centres of social assistance. The initiative was recognized within the OECD project "Local scenarios of demographic change" in which the Marshal Office of Malopolska region participates.

Antoni Wiatr, sekretariat@mddps.internetdsl.pl, Tel.: + 48 12 4256465

http://www.mddps.krakow.pl/

Further information: Antoni Wiatr, sekretariat@mddps.internetdsl.pl, Tel.: + 48 12 4256465

http://www.mddps.krakow.pl/

3.5. Inter-Communal Cooperation

The following examples show that creating cooperation and synergies between communes and municipalities also allow cost savings while adapting to demographic change. At the same time the provision with needed infrastructure and services is maintained for the citizens.

3.5.1 Administration Union Schwalm-Eder-West

Objective: Using synergies of neighbouring communities.

Main activities: In 2003 five neighbouring municipalities in Hesse set up an administration union. The reason for this establishment was a needed adaptation to processes of demographic change in the region. The five municipalities are working together in several fields; the focus of their cooperation is the adaptation of the transport infrastructure, a common real estate management for the marketing of vacant buildings, cooperation of administration and the creation of an inter-communal enterprise centre. One example for the inter-communal cooperation lies in the area of administration. Here, the five municipalities are working together amongst others in the area of

citizens' bureaus, IT and provision with child care. At the same time the municipalities guarantee the maintenance of citizens' service and cooperation amongst the employees in a back-up office.

Cost Savings: Cost reductions can be realized through inter-communal cooperation and bundling of services.

Location: communes Bad Zwesten, Borken, Jesberg, Neuental, Wabern/Hesse, Germany

Provider/responsible: Zweckverband Interkommunale Zusammenarbeit Schwalm-Eder-West, Am Rathaus 7, 34582 Borken, Tel.: +49 (0) 5682 808-154, kontakt@schwalm-eder-west.de

http://www.schwalm-eder-west.de/w3a/default.jsp

Further information: Service Agency for Demographic Change

http://serviceagentur-demografie.de/ideenboerse/projekt/zweckverband-schwalm-eder-west.html

3.5.2 Mobile Citizens Advice Bureau

Objective: Reducing expenditures for public administration and creating time and cost savings for communes and citizens.

Main activities: Development of a mobile and flexible Citizens Advice Bureau in form of a suitcase that carries the needed equipment. For the usage of the suitcase only internet access is necessary. With the flexible Citizens Advice Bureau all surrounding small municipalities of Wittenberg can be reached.

Cost Savings: Costs savings for communes can be realized because the flexible bureau is less cost intensive than a permanent one. The development of the suitcase created costs of around 5 000 €. Its usage enables cost savings of around 50 000 € because the installation of fully equipped administration offices is not necessary anymore.

Location: Wittenberg/Saxony-Anhalt, Germany

Provider/responsible: Lutherstadt Wittenberg, 06886 Lutherstadt Wittenberg

Joerg.Bielig@Wittenberg.de, Buergerbuero@wittenberg.de

Further information: competition BMVBS 2012 "People and Success"

http://www.menschenunderfolge.de/wettbewerb-2012/aktuelle-beitraege/beitraege-2012.html

3.5.3 Integrated and efficient planning of infrastructure in rural areas

Objective: Restructuring existing infrastructure through inter-communal cooperation in order to secure the provision with efficient and user friendly infrastructure in the future.

Main activities: For realizing the aim of the project an extended analysis of the potentials of the communes of the Lommatzscher Pflege was carried out. The analysis focussed on the central

social and technical infrastructure, the public transport system and retail. Also the communal finance situation was analysed. In a second step the demographic change and its consequences for the infrastructure provision was analysed. Here the forecast of the population development until 2020 was regarded. In a third step the mayors of the Lommatzscher Pflege were involved formulating aims concerning the future development of social and technical infrastructure. Afterwards the project team developed concepts securing an efficient and qualitative provision with infrastructure under demographic change. Then first steps were taken to realize some of the suggested concepts in different infrastructure areas. Now also the districts and other stakeholders were involved. Realized concepts included: organization of semi-central facilities for water supply and sewage water treatment; establishment of subsidiary medical practices in the surrounding communes that work together with a central practice in the main town.

Cost Savings: Through the inter-communal cooperation new concepts for reducing public spending on the provision with social and technical infrastructure could be realized such as the construction of semi-centralised sewage treatment facilities and establishment of subsidiary medical practices. The project was part of “MORO - Modellvorhaben der Raumordnung”, a programme of the Federal Ministry of Transport, Building and Urban Development (BMVBS) for testing and realizing innovative spatial planning approaches together with stakeholders from practice and the sciences. The programme was realized by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the Federal Office for Building and Regional Planning (BBR). In the frame of MORO several projects and initiatives were initiated in the area of “Infrastructure and demographic change”.

Location: Lommatzsch and surrounding communes/Saxony, Germany

Provider/responsible: Association Heimat und Kultur in der Lommatzscher Pflege e.V. (project leader)

responsible at BBR Martina Kocks martina.kocks@bbr.bund.de

Further information: MORO

http://www.bbsr.bund.de/cln_032/nn_484888/BBSR/DE/FP/MORO/Forschungsfelder/InnovativeProjekteRegionalentwicklung/Modellvorhaben/InfrastrukturUndDemographischerWandel/IntegrierteInfrastrukturLommatzsch/IntegrierteInfrastrukturLommatzsch.html?__nnn=true

3.6 Other infrastructure and service fields

In this sub-chapter best practices from infrastructure and service fields are presented that will not be covered by pilot projects within the framework of ADAPT2DC. Nevertheless, since water supply and sewage treatment are a fundamental part of technical infrastructure and entrepreneurship is an important issue for the communes in terms of being also economically competitive, they will be presented in this section.

3.6.1 Water supply and sewage treatment

The problem with technical infrastructure especially in sparsely populated regions is that the fix costs are increasing because the number of users is decreasing; additionally also the functioning of water supply and sewage treatment is threatened when the systems are not being used by a minimum number of people (Steinführer/Küpper 2011: 8).

Adapting technical infrastructure is rather difficult since these are mostly huge and inflexible facilities with high fix costs (Hansestadt Stendal 2010: 119). Nevertheless, there are several possibilities adapting water supply and sewage treatment to demographic change. In the area of water supply the facilities can be reduced and refitted. Also the tariffs for water supply can be adapted: for example, water has the lowest price in areas that are well equipped with water infrastructure and that are densely populated. Another possibility for adapting water supply is cooperation between several providers. In the area of sewage treatment parts of the facilities can be stripped down. But the partial reduction of facilities might create high costs. On the long term the extensive reduction of facilities and the building of semi-central nets with decentralised sewage treatment seems to reduce costs (ebd.: 132-139). The following examples show different possibilities how to adapt water supply and sewage treatment and/or create additional income for the providers.

3.6.1.1 Reduced water provision costs

Objective: Reducing costs for water provision.

Main activities: For the realization of this objective an optimization of operational procedures was realized for example by a demand oriented channel cleaning, the usage of regenerative energy sources and a stronger inter-communal cooperation.

Cost Savings: The reduction of costs is realized through following measures:

- adjustment to demand-oriented channel cleaning (25 % cost savings)

- autonomous planning, announcement and construction management of building activities (15 %)

- development of a sewage-database and an associated survey-technique (30 %)

- installation of a photovoltaic roof system on the purification plant (15 %, it covers the energy demand of 2 month).

Location: Dörentrup/North Rhine-Westphalia, Germany

Provider/responsible: Gemeinde Dörentrup, 32964 Dörentrup, m.hecker@doerentrup-lippe.de, http://www.doerentrup-lippe.de/

Further information: Federal Ministry of Transport, Building and Urban Development, http://www.bmvbs.de/EN/Home/home_node.html

competition BMVBS 2011 “People and Success“

http://www.menschenunderfolge.de/pages/wettbewerb-2011/projekte/projekt137.php.

3.6.1.2 Efficient purification plants

Objective: Development of energy efficiency solutions for purification plants.

Main activities: A higher efficiency of purification plants can be realized by exchanging pumps, optimizing the sewage sludge digestion, shutting down the agitator during ventilation and building a micro gas turbine for the usage of sewage gas.

Cost Savings: Cost savings could be realized through a more efficient energy supply and the creation of additional income for the purification plant by using sewage gas for additional gas production.

Location: Bad Ems/Rhineland-Palatine, Germany

Provider/responsible: Verbandsgemeindeverwaltung Bad Ems, Bürgermeister Josef Oster, Bleichstraße 1, 56130 Bad Ems, Tel.: (02603) 793 0, vg@bad-ems.de, http://www.bad-ems.de

Further information: Bundesumweltamt (2010) (Ed.): Demografischer Wandel als Herausforderung für die Sicherung und Entwicklung einer kosten- und ressourceneffizienten Abwasserinfrastruktur, Dessau-Roßlau, p. 128-129.

3.6.1.3 Active Energy Concept

Objective: Capitalisation of waste products that are emerging in the process of sewage water treatment.

Main activities: With this active energy concept additional income for the purification plant can be created. This is being realized amongst others through the production of gas through parallel fermentation of organic waste, the pelletization of sewage sludge and the usage as energy source for creamation.

Cost Savings: Creation of additional income through energy production.

Location: Moosburg/Bavaria, Germany

Provider/responsible: Kläranlage Moosburg GmbH, Neustadtstr. 100 85368 Moosburg, Tel.: + 49 (0) 8761 72181-0, info@klaeranlage-moosburg.de

Further information: Bundesumweltamt (2010) (Ed.): Demografischer Wandel als Herausforderung für die Sicherung und Entwicklung einer kosten- und ressourceneffizienten Abwasserinfrastruktur, Dessau-Roßlau, p. 130-131

EnergieAgentur Berghamer & Penzkofer, Moosburg,

http://www.biukat.de/images/stories/dokumente/Publikationen/UTF1/biukat_tagungsband_utf1.pdf

3.6.1.4 Adapted Sewage Treatment Plants

Objective: Merging of sewage treatment plants.

Main activities: A big sewage water treatment plant takes over the sewage water of the neighbouring communes and the created costs are split between the involved communes.

Cost Savings: Cost saving options through a more efficient organisation of sewage water treatment. The costs for modernisation and connection of several sewage treatment plants have to be calculated in advance.

Location: Dresden/Saxony, Germany

Provider/responsible: Stadtentwässerung Dresden GmbH, Kläranlage Dresden-Kaditz, Scharfenberger Str. 152, PF 10 08 10, 01078 Dresden, Tel.: + 49 (0) 351 822 0

Further information: Bundesumweltamt (2010) (Ed.): Demografischer Wandel als Herausforderung für die Sicherung und Entwicklung einer kosten- und ressourceneffizienten Abwasserinfrastruktur, Dessau-Roßlau, p. 163-164

3.6.1.5 Adapted Water Supply

Objective: Adapting water infrastructure to shrinkage.

Main activities: The adaptation of the water infrastructure to the population shrinkage is realized amongst others through the adaptation of the given technical infrastructure to the demolition and building of new houses, a closedown of not needed net parts, the adaptation of net capacities, the development of a concept for sewage water treatment and drinking water provision and the integration of the concept for infrastructure into an integrated city development.

Cost Savings: Reduction of costs can be realized through the demolition of not needed infrastructure.

Location: Hoyerswerda/Saxony, Germany

Provider/responsible: Stadtverwaltung Hoyerswerda, Dietmar Wolf, Dezernent für Technische Dienstleistungen, Tel.: + 49 (0) 3571 456500, dietmar.wolf@hoyerswerda-stadt.de

Versorgungsbetriebe Hoyerswerda GmbH, Herr Grigas, Tel.: + 49 (0) 3571 469100,

sekretariat_gf@vbh-hoy.de

Further information: http://www.stadtumbau-ost.info/

3.6.1.6 EuWAK - Natural gas and hydrogen produced in purification plants

Objective: Decentral hydrogen production from fermentation gas.

Main activities: The fermentation gas is being used to produce natural gas and hydrogen. Within the project EuWaK the produced fermentation gas supplies three gas engines that are covering the

whole heat- and electricity demand of the purification plant. Parts of the fermentation gas are converted into natural gas which is being used for the gas station on the area in order to supply the vehicle fleet of the purification plant. The rest of the natural gas is being converted into hydrogen and forwarded to a neighbouring school and a swimming pool. There the hydrogen is being used for the production of electricity and heat in a hydrogen engine.

Cost Savings: Cost saving can be realized through the usage of fermentation gas for the production of electricity and heat for the purification plant, gas stations and neighbouring infrastructures such as schools and living complexes.

Location: Bottrop/North Rhine-Westphalia, Germany

Provider/responsible: Emschergenossenschaft Lippeverband, Kronprinzenstraße 24, 45128 Essen, Tel: + 49 (0) 2 01 104 0, http://www.eglv.de/

Further information: http://www.eglv.de/emschergenossenschaft/ueber-uns/kooperationen-und-projekte/euwak.html

3.6.2 Entrepreneurship

3.6.2.1 Self supporting village of Túristvándi

Objective: The main aims are the building of a sustainable operating business system for the local food production, the ensuring of the local energy consumption from agricultural waste and the support of local entrepreneurship.

Main activities: Due to the aging of the population and a lack of income for the locals the administration of the region decided to build a sustainable operating business system. The idea was to produce and sell fruits, vegetables and meat in the village, and not take it from the supermarkets or abroad. Local producers and entrepreneurs were identified who produce - or would produce – such goods, that could be supplied to the consumers directly by selling them on the local market. In order to find out the available degree of self-supporting, the local demand and supply was analyzed, and the municipality established a non-profit entity, that has "social agreement" both with the producers and consumers. The agreement guarantees the takeover of goods and their delivery to the consumers, at pre-determined prices. The non-profit entity defines a much lower margin rate on "consumer price" than the usual dealer margins are, so in that way the producer gets more for his products, and the customer will not pay more than in the nearby store. The local vendors has no extra stand fee for the market, however the non-locals have to pay for the market place.

Cost Savings: In June 2012 80 % of the local food consumption will be met by local products. The non-profit entity has created thirteen new jobs so far. The self-supporting system ensures jobs for the people, it provides the conditions for agricultural production, guarantees the takeover of goods, and ensures the good quality of products.

Location: Túristvándi municipality, Hungary

Provider/responsible: Észak-Alföld Region, Eszter Balázsy, eszter.balazsy@eszakalfold.hu

http://www.eszakalfold.hu

Further information: http://www.turistvandi.hu/

4 Conclusion

The presented best-practices concerning the adaptation of technical and social infrastructure and services reveal two general developments: often they are funded and supported by public funding from the local, regional, national and/or European level. And the projects also often depend on voluntary engagement of the citizens.

Another point came to the fore: cost savings should be seen on the long run. Often these are indirect savings. For example, if people are longer active and mobile the probability increases that they will stay healthier for a longer time; promotion of public transport, supplemented by individual solutions like citizens busses can help to reduce ecological consequences and by that save money; telemedicine allows reducing time spending and travel.

When looking at the strategies of communes and citizens to adapt to the consequences of demographic change differences become obvious. On the one hand communes try to develop strategies in order to adapt its infrastructure to the consequences of demographic change. Literature on demographic change reveals that most of the adaptation is concerned with retrenchment, the cutting of infrastructure and service offer (reduction of opening hours, closing of facilities) and with reorganisation of infrastructures and services in form of decentralisation, centralisation or mobile concepts (Steinführer/Küpper 2011: 10-11).

The citizens on the other hand develop coping strategies while adapting their needs to the changed provision with infrastructures and services that is marked by reduction. Additionally they make use of their social networks in order to cope with the changing situation (Steinführer/Küpper 2011: 12).

While collecting best practices for this catalogue it became clear that the transferability of best practices depends on the national framework conditions like the economic situation or the political-administrative system of a country (Winkler-Kühlken 2003: 783). Nevertheless, the presented examples also reveal transferable instruments like the re-structuring of the existing infrastructures and services in connection with other options. For example, the mobility offer has to be improved when the provision with health care is being centralised. Another possibility is the combination of public and private responsibility, for example when a private initiative for a citizen's bus is being funded by public investment (Winkler-Kühlken 2003: 784).

For a successful development and realization of adapted infrastructures and services the following aspects should be considered:

- Cooperation between institutions of the same/different type within one infrastructure/service field.

- Development of integrated calculations of profitability through considering all costs when calculating expenditures of one facility.

- Integration of citizens into the development of adaptation strategies for creating acceptance and awareness.

- Pilot projects that are testing adaptation models have to be realized with a long perspective in order to realize the needed re-structuring (Winkler-Kühlken 2003: 787).

- Combining different funding schemes on several levels.

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