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Making Information Systems Work for the Poor: The case of media

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Dr. Ben Taylor

Rob Hitchins

Dr. Jon Burns

Karen Smith

btaylor@springfieldcentre.com

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This paper considers the importance of information and the constraints to its availability and appropriateness in a development context. It applies a standard framework for development effectiveness to assess the efficacy of different approaches to information-focused intervention, looking specifically at the case of media as the information channel which has received the greatest attention of donors. The predominant forms of development engagement in media has either been through 'development communications' arising from programmes operating in other sectors or by paying for certain functions of the media system such as technology. The empirically grounded argument is made both of these approaches fail to deliver sustainable impact. This paper makes the argument that a systemic approach to intervention, however, can deliver effective, sustainable change for large numbers of poor people beyond such conventional forms of development intervention.

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1. Introduction

Information shapes decision making for poor people, and also shapes the decisions of others which impact upon them. Information asymmetries are, therefore, a significant determinant of poverty. Development intervention has the potential to change the systems by which information is produced, exchanged, and consumed and its efficacy in doing so is fundamental to long-term economic, social, political, and health outcomes for poor people.

Development intervention in general is continually evolving, shaped by evidence as well as politics and donor priorities. One of the major debates currently taking place across development is whether the purpose of donor engagement is to be a continual transfer from rich to poor or is to improve the functioning of economies in developing countries to cater to the needs of their citizens more effectively. This is characterised in the shift from the *Millennium Development Goals* to the *Sustainable Development Goals*. Different approaches to development have engaged with this question to different degrees and one of the goals of this paper is to examine how it has been realised in donor engagement in information systems. How well are interventions that impact on information systems achieving goals of changing the way these systems work and how is this impacting on poverty reduction?

Following this introduction, the paper is divided into six brief sections. Firstly, there is a clarification section on what is being considered as information within the paper and why it is seen as important. The framework for analysis of information systems, or more accurately a way of conceiving of information as a transaction within a system, is outlined. This then allows section four to examine and categorise development interventions in information systems, situated within this framework. In section five a justification for selecting media as a lens for applying these categories to specific donor interventions, following which section six applies to the criteria of effectiveness, scale and sustainability to assess the impact of each approach to intervention in information systems. Finally, a concluding section then draws these findings together and suggests how it might influence donor thinking in the area.

2. What is 'information' and why is it important for development?

The answers to both of these questions may seem obvious, but in the context of the piecemeal and largely unsuccessful approach documented in this paper, they are worthy of a brief exploration. According to the 1948 declaration of human rights, everyone has a right to education because:

"It opens doors and expands opportunities and freedoms. It contributes to fostering peace, democracy and economic growth as well as improving health and reducing poverty. The ultimate aim of Education for All (EFA) is sustainable development"

For education, read information. When one conceives of information, delivered through the informal channels that poor people could feasibly have access to, it is clear that it shares all of these positive attributes and more. Just as banks offering bank accounts does not mean an effective financial services market if poor people aren't using them, similarly, a democracy is not effective if people don't have information on who it is possible to vote for, or when or where to vote. Information on what measures individuals can take to improve health outcomes are just as important, if not more important, than the development of products which allow them to do so. From an economic perspective, while education can facilitate literacy and numeracy, which can allow access to higher paid work, information on crop disease or corruption in market places can have an instant impact on the lives of poor people. Every transaction that affects poor people's lives is governed by information, which determines their access to and benefit from all goods, services, and rights. Its primacy, therefore, cannot be overstated (Stiglitz, 2002; 2004). Information is a key driver of agency which is perhaps the most complete indicator of development (Sen, 1999).

And donors too have recognised this:

(A)ddressing the information and communication needs of the poor and creating information rich societies is an essential part of efforts to tackle poverty (DFID, 2002: 4).

Despite this recognition, however, improving information flows has rarely been a focus of programming. The following section sets out a framework for looking at improved information as an end in poverty reduction, allowing for an assessment of how different development interventions have sought to achieve that end.

3. Analytical Framework: Information as a system

In order to understand the different ways people do, or don't, receive information, it is useful to employ the market systems framework adapted for Taylor (2016).

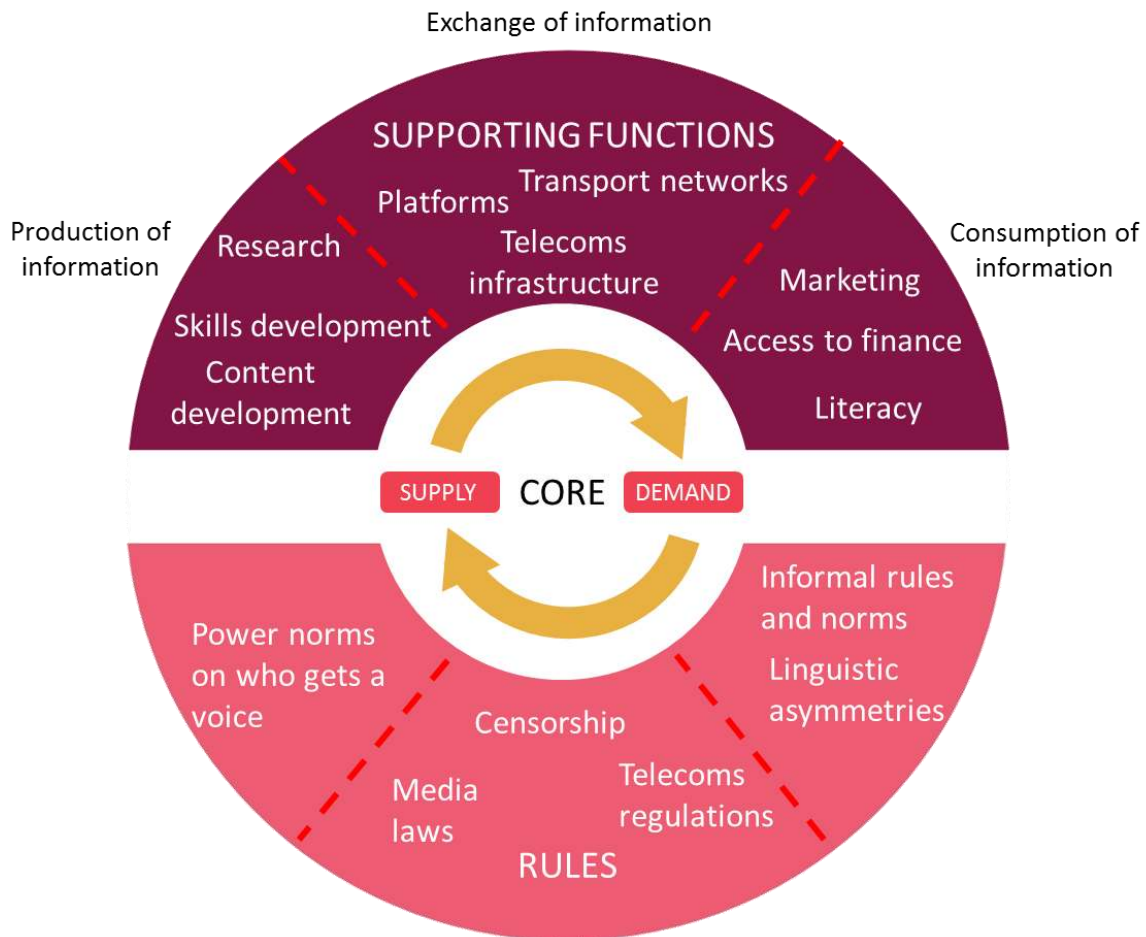


Figure 1: The information system

This framework separates the core transaction of the supply and demand for information into production, consumption and exchange. The poor can play both supply side and demand side roles in the transaction. The 'performance' of the transaction can be understood as sub-optimal quality, quantity, or price, in any of the three components of supply, demand, or exchange.

The information system shown in Figure 1 is only partially complete – there are many more functions and rules needed to ensure a well-functioning information system from the perspective of the poor. However, what is shown in the diagram are some of the important supporting functions and rules for each of the three components of the transaction. In production, for example, the quality of information supply may be inadequate because the research function is underperforming. There may be very effective transmission mechanisms through public service broadcasting, agricultural extension workers, or mobile phone messages. There may also be sufficient demand for information with high audience figures, or consumers seeking out health workers. However, because the research function is not producing quality information, be it on emerging crop diseases, cost-effective hand washing behaviours, or how the policies of different elections candidates will affect the poor, the

benefits of well-performing exchange and consumption components of the transaction are negated.

Understanding the information transaction in this way adds clarity to the objective of intervention; to improve the performance of the information transaction for the benefit of the target group. It also helps to understand the consequences of different approaches to intervention.

4. Development intervention information systems

Research conducted for this paper found no development programmes that have been commissioned under the mandate of improving information systems. Nevertheless, a wide range of development programmes across sectors have sought to influence the transaction in different ways. Using Figure 1 as a lens, the mechanisms by which development intervention has sought to influence the transaction can be analysed and, in the subsequent sections, used as a hypothesis to explain outcomes.

Development intervention to address information constraints can be categorised in three general groups, in decreasing order of prevalence.

Firstly, development intervention has occupied one or more of the components of the core transaction. They have developed and disseminated information, for example researching and producing leaflets on hygiene behaviours, effectively playing the roles of supply and exchange. In doing so, they are effectively performing all of the implicit supporting functions and rules necessary for the transaction. In many cases, they may only play the role of exchange, sending extension workers out to train farmers where the public extension system is not reaching. Here, there is usually an impact on all three performance metrics quality, quantity and price. Quality is derived from information which is sourced from abroad. Quantity comes from increasing the scale of information dissemination, and price is impacted as there is generally no cost to consumers. Primarily, this comes through programmes focused in other specific sectors, such as agriculture, health or education. Information might be social, for example on health behaviour, or economic, on good agricultural practices, is not available within a system. Alternatively, development actors can attempt to give poor people voice by collecting information from them (poor as suppliers) and then act as an advocacy organisation on their behalf, effectively playing the exchange function in the transaction. This approach to intervention in information systems is most commonly referred to as '**development communications**' and accounts for the vast majority of donor spending in this area.

Secondly, development intervention has engaged in efforts to improve a specific part of the information system explicitly. These are programmes which have an information rather than a sectoral focus. They have targeted constraints, such as ICT or a radio station as a dissemination platform or journalistic skills as input to the strength of the mass media platform, and paid for their improvement or operation directly. Examples of interventions in this group – **paying for a specific function of the information system** - include, the building of training centres for broadcast journalists, developing agricultural market information systems or creating tele-clinics in the health service sector.

The final group of development responses to constraints in information systems can be characterised as the **development of functions within the information system**. Again, these programmes have not started with an objective of addressing the issues with the information system but have tended to come from a sectoral standpoint. The difference between this group and group one is that they have used sectoral analysis to arrive at a particular type of information as a problem, and then sought to address the issue in different ways. Subsequently, intervention under this approach seeks to develop an underperforming function or rule within the system using the capacities and incentives of other players, rather than performing that function as a development actor.

This reflects a wider trend, where development actors are attempting to achieve a more 'systemic' impact. Emerging from institutional economics, a literature and field of practice has evolved over the past decade on a systemic approach to development (The Springfield Centre, 2008; 2015).

5. Media as a case study

Within the information system, the media is part of the exchange component of the transaction. When working effectively, it relays information from the poor as producers to those who can improve their outcomes as consumers. Similarly it can be used as an exchange platform for the poor as consumers of information. Once media is identified as an underperforming supporting function of the information system, it can be examined as a system in its own right. This is useful because the players with the incentives and capacities to improve the functioning of the media system, are not likely to be the same as the players with the incentives and capacities to reform the information system. Nevertheless, based on the above analysis, improving the performance of the media system will have the desired positive impacts on the information system and thus the outcomes for the poor as producers and consumers of information.

The media will be used as a case study, here, to examine the efficacy of development intervention in the information system for two main reasons. Firstly, the media is a useful

example of the importance of information articulated above. The media in its conventional print and broadcast (radio and television) forms, as well as new forms of media utilising internet and mobile technologies, is a channel with the potential to reach significant numbers of people across demographic groups in terms of both incomes and geographies. The media is also an example of the transactional nature of the information system. In an effective system, poor people can play the role of both demander and supplier of information using the media platform. This has implications from economic prosperity to human rights and democracy.

The role of such private and competitive media is held to be so important for the checks-and-balances system of modern democracy, that they have come to be called "the fourth estate," along with the executive, the legislature, and the courts (Djankov, 2002: 2).

In addition to, and perhaps because of, its importance in poverty reduction, the media has received significant attention from donors in each of the three groups of intervention identified above. Development actors spend an estimated £625m on interventions classified as 'media' annually (CIMA, 2015). Radio has been a particular focus because it is comparatively cheap and accessible to poor, illiterate or semi-literate audiences, who tend to have limited access to other forms of media. This also means that, in an under-researched field, media is an area in which there is a greater availability of data across the intervention typology identified above.

In order to compare the efficacy of interventions impacting on the information system, a framework for assessment is required. A modified version of OECD DAC's evaluation criteria (OECD, 2015) is employed: (a) *effectiveness*, i.e. the extent to which defined benefits have been achieved, according to a theory of change; (b) *scale* of impact, i.e. the extent to which benefits have reached a significant proportion of the targeted population; and (c) *sustainability*, i.e. the extent to which stimulated benefits continue after the period of aid intervention has ended (Taylor, 2013). This paper will adopt Taylor's (2014) definition of sustainability in development, as being a permanent increase in adaptability.

The assessment which follows draws on academic reviews, grey literature, and some non-experimental primary data from programmes. Overall there was a paucity of rigorous data but that which was available is sufficient to provide an illustration of the potential impacts and trade-offs in pursuing each of the types of interventions identified above. The selection of material was as comprehensive as possible, with thematic rather than methodological inclusion criteria. The final category, developing information systems, relies on three case studies owing to the small number of programmes that have pursued this type of development intervention.

6. Assessing the efficacy of development interventions in media

This section assesses a typology of different approaches to intervention in the information system through media, rather than an assessment of specific interventions. These can be broadly characterised as i) using the media as a tool to deliver information – development communications ii) attempting to fix problems in part of the media system – paying for a specific function of the information system and iii) attempting to facilitate the development of local media systems that represent the interests of the poor – developing functions of the information system.

6.1 Development communications: using the media as a tool

Commonly known as ‘pay-to-play’ in the media sector, development communications involves a development actor generating content, which it then pays to have disseminated through existing media platforms. As noted above, it is the dominant form of development engagement with the media. USAID, for example, spends four times more on communication for development than on developing independent media (Kaplan, 2012).

Effectiveness: development communications can be an expedient way to deliver a message. It is rapid and focused, and allows a development actor to retain control. It has proven particularly useful in sudden onset emergencies, for example, where affected communities need to be directed urgently to shelter or food relief or, in the face of a pandemic, where simple behavioural messages need be communicated quickly to large populations. Even in such situations, however, the effectiveness is still impacted negatively by a general problem of development communications; appropriateness.

The pay-to-play approach relies on ‘information push’ and is therefore not responsive to intended audiences. This can either mean that the information is not accurate for the local context or that it does not deliver the information in a way that is demanded by the recipients. This limits the potential for behaviour change as a result of the intervention and, thus, its effectiveness.

In situations where information needs are recurrent and changing, where content is more complex, or where the poor can be considered a supplier of information, the absence of the opportunity for recipients of information to shape its content and delivery reduces its utilisation. In this sense information is unlike many other commodities which are delivered in response to a perceived need. Giving food to the hungry means they will probably eat it but giving information on women’s rights to poor communities does not necessarily mean that behaviour will change.

While media professionals, opinion-shapers and development assistance policy-makers have often sought to utilise communication systems for social mobilisation and change, a lack of understanding of behavioural, societal and cultural factors on end-user consumption patterns has more often led to ineffective, or even counterproductive, outcomes (Servaes, 2008: 389).

Scale: Achieving scale is a key rationale for disseminating information through the media, as it is compared with other forms of direct dissemination of information such as production of posters, leaflets, or verbal communication through visiting communities. Potential for coverage is therefore high, or at least commensurate with the level of funding available. The efficiency or value for money of such an approach might be questioned however, since aid funding tends not to leverage investment by actors in the system; a development actor only gets the outreach it pays for, for as long as it is prepared to pay for it. Empirically, in order to communicate a message which is paid for directly the funding required is substantial and has only been achieved in situations where there is a coordinated international effort, such as the Ebola response in West Africa in 2014.

Sustainability: A lack of sustainability is the clearest weakness of the pay-to-play approach. Communicating a simple message for a limited period of time might have a sustained impact on the behaviour of individuals receiving the message. However, reaching new individuals or disseminating new messages in response to changing situations is not possible without further external funding. Moreover, it has been found that pay-to-play initiatives can damage existing media systems by introducing an orientation to or dependency on aid funding; they perpetuate unsustainable media financing models and undermine the principle of the 'virtuous circle of news media', whereby quality journalism generates sustained audience numbers, which attract numerous advertisers, which in turn funds quality journalism (Foster, 2011). Such initiatives can also weaken the incentives of media to be responsive to audience demands and generate original content.

Development communication involves an actor external to the system playing all of the supply-side roles – both performing and paying for these supporting functions - of the information system and paying for all the exchange roles. A development communications approach where the media is used as a means of achieving the objectives of another development initiative can be effective in some cases where there is a one-off need for the delivery of a clear and simple message and where there are significant funds available to do so. However, where these criteria are not in place, there are significant challenges to the effectiveness and scale of impact that can be achieved. Moreover, under all scenarios, sustainability of impact is negligible and in some cases negative, as it results in a distorted media system oriented to the funds and agendas of development actors, instead of contributing to the development of a more vibrant, audience-responsive media system.

6.2 Fixing problems in the media system

As demonstrated earlier, media is a platform for the exchange of information and is of concern to development where the information concerned might benefit the poor, as suppliers or consumers. Media is, however, also a supporting market in its own right. In order for the information system to perform better, the media system, with its own set of supporting functions and rules performed by a different set of players with a different set of incentives and capacities, must also improve performance. Figure 2 represents a simplified version of the media system as a supporting system of the information system.

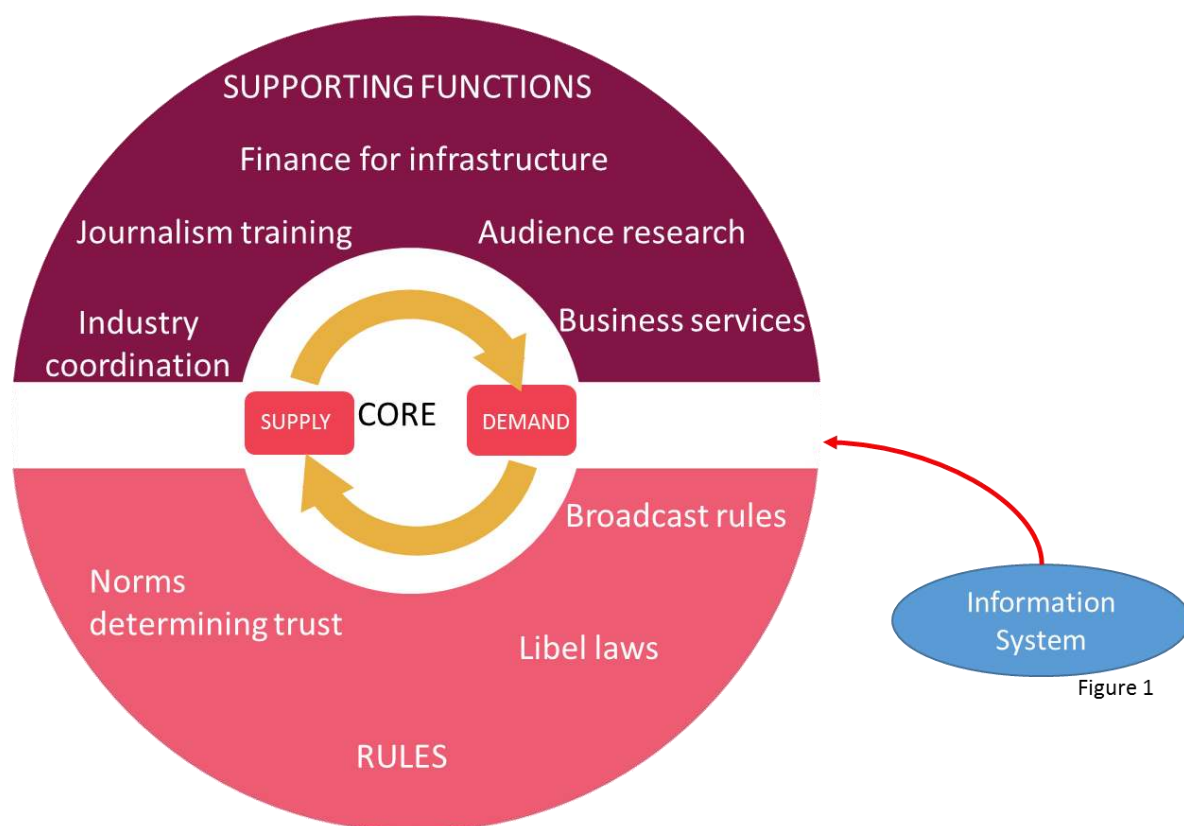


Figure 2: The Media System

Disaggregating funding for media development is not straightforward because of the diversity of organisations and objectives involved, as well as confusion over definitions of terms. Kaplan (2008) categorised media interventions funded by US development programmes as follows:

- Direct assistance: funding for equipment, salaries, and other operational expenses, i.e. addressing financial constraints in the media system (25%);
- Training: addressing skills constraints in the media system (44%)
- Economic sustainability: addressing constraints relating to business management and marketing in the media system (9%).

A further 9% of funding was directed at regulatory issues within media systems, but individual cases of this type of intervention are not commonly available for analysis. Therefore, programmes targeting the first three of these constraints - finance, skills, and business management - in the media sector are examined here for their efficacy. Using the evidence available, it is possible to say what the impact of development intervention has been in addressing the constraints targeted. It is also possible to identify further constraints within media systems that have received little direct support from development programmes. Finally, and in order to link this back to a functional media system as a conduit for information to and from poor people, these interventions can be assessed in aggregate for the impact they have had on the media systems concerned.

Finance

In promoting the evolution of a free press that can contribute to transparent governance, development actors have provided financial resources for supply-side development, i.e. start-up and operating costs, and capital for equipment, to build or strengthen media organisations.

In the Democratic Republic of Congo (DRC), funders spent \$31m on a 'flagship' public sector broadcaster, Radio Okapi. The station was dependent on foreign aid and not sustainable through local means. The short-term effectiveness of Radio Okapi was at the cost of developing a viable commercial media industry (Frère, 2011). Its high salaries made it difficult for local commercial media outlets to compete for good staff and the station undermined the viability of these independent actors by taking their audience and thus distorting the market.

Direct financial assistance has also frequently been used to establish community radio organisations, non-profit broadcasters run for and by local communities. In a review of African community radio development.

[D]onors have funded a proliferation of community radio projects in the Global South...In practice, the record has been mixed, with sustainability a critical challenge. Da Costa (2012: 1)

In cases cited from Senegal and Niger, research shows that media development interventions have become permanent features of the community radio systems they sought to create, creating dependence. The problem is not simply sustainability through financial dependency but also a failure to institutionalise local ownership and compromising the effectiveness of the information (Conrad, 2010). The scale of impact from these finance interventions is limited by the proliferation and outreach of the platforms. There are hundreds of FM radio stations in every country catering to different populations, each potentially accessing different populations. Donors cannot possibly fund all of these stations and so

their impact is limited to those that they support without a more structural change in the media system.

In providing finance directly to media organisations, interventions have often displaced local ownership and failed to increase the availability of finance within the media system, be that through commercial investment, bank finance or viable broadcasting business models. Finance has been seen as something that agencies provide temporarily, rather than as an important supporting function of the media system.

This is reflective of a phenomenon seen in another information platform, ICT, where donor support is now being withdrawn in the context of ever more pressing needs (Heeks, 2015). The reason behind this is that work has been seated in the technical realm and been focused on design and diffusion of technology rather than impact on poor people (Heeks, 2010). This is equivalent to the financing of radio stations rather than looking at how they are used to disseminate information to and gather information from the target group.

Skills

A large proportion of media development interventions focus on shortfalls in media-related skills, particularly journalism. The International Programme for the Development of Communication (IPDC) was set up under UNESCO in 1980 to pursue the 'development of free and pluralistic media', spending over \$100m to date on media development initiatives in 140 developing countries. The most recent evaluation report (IPDC, 2015) covers 16 initiatives and incorporates sustainability as one of the success criteria.

Of these projects, 12 focused primarily on building journalistic capacity through various combinations of direct training delivery, training of trainers and investment in course content and facilities. The effectiveness of these projects was generally found to be good in that the training had increased the capacities of those trained. However, only two of the initiatives reviewed reported sustainable outcomes. Nine were reported to require further funding or further training and one was reported to be unsustainable for other reasons. The initiatives may have delivered a number of more skilled media staff, and in some cases a better training facility to continue such upskilling, but, overall, none could be said to have reached sufficient scale to address this constraint within the media system.

In the DRC, donor spending on media development was over \$80m in a ten-year period (Frère, 2011) and one focus for this expenditure was on media training. Reviews of training initiatives showed that they benefitted small numbers and failed to increase the quality of learning. Where journalistic staff were trained, benefits to parent media organisations were seen to be limited. It was also noted that

Very few development intervention has chosen to support journalism schools in the DRC, even though some of these schools were established years ago. Donors are probably frightened by the critical problems these training institutions have (Frère, 2011: 55).

Overall, the assessment of development intervention in training provision in the DRC shows limited impact in terms of all effectiveness, sustainability and scale at an institutional level, before even progressing to examine the impact on the information transaction involving the poor.

Substantial donor support to media training in Mali, estimated at \$30m per annum included initiatives such as the introduction of *Maison de la Presse* as a centre for training, information, and networking for members of the Malian press (Gilberds, 2012: 22). However, training was mostly focused on short-term communication needs, professional standards remained low, and little attention was paid to the enabling environment for education; there were no journalism schools or professional training centres, rendering the continuing development of media skills unsustainable.

These skills-related initiatives appear to have achieved little in terms of any of the three defined criteria. Their effectiveness and scale of impact on the media system overall has been limited. Skills were identified as a problem prior to engagement, but interventions either channelled effort into already inefficient mechanisms, magnifying their inefficiencies, or circumvented entirely them by creating new centres that failed to respond to demand, and which have proved unsustainable.

Business management

A 2011 WAN-IFRA found that:

In recent years, international aid and assistance resources have been overwhelmingly concentrated on the development of journalism skills...There is only an occasional nod toward educating media professionals in the business skills and market forces that are fundamental to sustaining their news organizations (Nelson et al, 2011: 7).

Commercially viable business models and competent management are essential to the development of a vibrant, independent media sector as:

Poor management...furthers donor dependency, which has a direct negative impact on media sustainability (Foster, 2011: 7).

Cognisant of the pitfalls of donor dependency, some development actors have started with an end goal of a profitable privately run media, but without a contextual appreciation of the pluralistic ways that an effective sustainable media might be achieved or of the competitive mechanisms which might deliver benefits to poor people. To do so, they have often sought to pay for and rapidly scale business management training and the replication of models

which rely on commercial advertising. Many of these models do not actually improve the information transaction; in some cases ‘pay-to-play’ can mean content is funded by large corporates who deliver equally non-responsive and supply driven content to donors.

In Mali, initiatives attempting to commercialise media led to a burgeoning sector; in 2011 there were over 300 FM radio stations and approximately 50 private newspapers operating across the country (Freedom of the Press, 2011). However, donor funding significantly declined once the country was seen as stable, leaving a sector with myriad dysfunctions.

The market is saturated with private stations that are unable to sustain themselves outside of donor funding, business models are poorly developed, and stations are clustered near urban centres, leaving the most rural and hostile areas of the north largely out of reach (Gilberds, 2011: 11).

Here, effectiveness and sustainability are seen as mutually reinforcing. A preoccupation with rapid scale up, in terms of quantity over quality and commercial viability of independent media houses meant that information was not being delivered effectively, audiences were not attracted and consequently the providers of information were not sustainable without donor support.

The Montenegrin Independent Media Program (MIMP) implemented by IREX included a component aimed at supporting the creation of media outlets in Macedonia as efficient profit-seeking businesses. Some success was seen through marketing and business management training, but ARD (2004: V) found that “despite this support...most media outlets do not break even and few are making strategic plans for a future where donor assistance will no longer be present”.

Media development in the DRC between 1990 and 2010 contributed to the emergence of a pluralistic industry, but Frère reported that 400 radio stations and 100 newspapers remained commercially fragile. This also paints a picture of an industry that has scale but little sustainability, and is ineffective at providing appropriate content. Frère observed that the donor community

[H]ave not yet addressed – and in many cases may even have contributed to – one of the primary challenges to the establishment of a quality media sector: that is, an uncontrolled, chaotic proliferation of media outlets (2011: 64).

Where much of the development communications work has prioritised effectiveness over scale, through the work in business management, development intervention has focused on scale over effectiveness and in neither case has sustainability been achieved.

Neglected constraints

If interventions in finance, skills and business management have yielded disappointing results, other important areas have largely been neglected entirely, most notably regulation and coordination of the media system.

Myers (2014) examined the role of media development in sub-Saharan Africa's media liberalisation process in the 1990s. The explosion of independent media has been seen in almost every country, with over 2,000 radio stations and 300 TV stations in sub-Saharan Africa. However, the

[P]roliferation of private media houses, co-existing as they did with local, paternalist power structures and immature democratic politics, produced a largely co-opted media that was unable to perform a watchdog role (ibid.: 27).

In an analysis of the Balkan region, Johnson (2012) highlights the problems of poorly coordinated media development strategies, which lead to inconsistencies in funding priorities. Johnson's analysis identifies a common failure to understand and address political economy considerations – the formal and informal rules that underpin the operation of the media system – as well as counter-productive short-termism.

Over the years, policy makers have identified the vital parts of a democratic media system, but what they have failed to fully understand is the dynamic interaction among them...numerous assessments by government sponsors and independent evaluators have reported success in achieving fundamental media freedoms in these countries, yet these media sectors have not demonstrated their anticipated transformative power – leaving struggling or dysfunctional organizations in the wake of donor financial retreat (ibid.: 1).

Similarly, US-funded media development initiatives in post-conflict Bosnia provided technical and financial assistance targeted the commercial sector. However, these were “too successful and resulted in a saturated and fragmented market unable to regulate itself.” (Johnson, 2012: 127). These initiatives led to scale in terms of numbers of organisations, but neglected to develop key supporting functions of the media system, hence its effectiveness and sustainability was inhibited.

Where have development programmes left media systems?

It is useful to extract and examine the constraints on which development programmes in media have focused, and indeed those on which they have not, which gives an impression of whether that constraint has altered as a result of the intervention. However, it is also useful, given that this has been the dominant focus of media specific development programming, to look at the aggregate impact on media systems of all of these programmes combined; the status quo. This helps to assess whether it is possible to address the overall issues in a media system through an uncoordinated approach of tackling a series of generic constraints.

Shepherd (1997) reports that in a survey of 120 countries, only 53 functioning market information services were identified, most of questionable utility and facing sustainability concerns.

Having decided to set up a service, governments, in their initial enthusiasm for the subject, often want to maximise coverage...Governments' recurrent budgets are unable to maintain the level of staffing input in the initial design. Staff are transferred to other responsibilities and are either not replaced or are replaced with untrained workers who cannot be trained due to lack of resources. Computer and other equipment are not replaced when it breaks down, again because of insufficient allocation in the recurrent budget. Costs of information collection and dissemination go up; for example, due to devaluation increasing fuel costs or as a result of state-run radio stations or newspapers suddenly demanding payment to carry market information (Shepherd, 1997; 53).

In the 20 years of development programming since Shepard, the available evidence does not deliver an improved verdict on impact.

The Media Map Project's paper *Making Media Development More Effective* is based on an extensive review of media interventions, drawing on case studies from Cambodia, DRC, Kenya, Indonesia, Mali, Peru and Ukraine. The research identifies insufficient clarity in media development objectives, and an associated lack of monitoring and evaluation, which not only leads to poor, unfocused programming, but also hampers the ability to learn lessons. The review concludes that the *"long-term impact has been less than strong relative to investments"* (Susman-Peña, 2012: 32).

Deane, in a multi-country study (2008: 10), concluded that media development interventions were "generally marginal, inconsistent, fragmented, unstrategic and short-term". Failures in intervention design are characterised as *'blind spots'* (Susman-Peña, 2012: 20) which have impacted on their overall impact.

International media development and media support is often structured and planned without taking into account the current and the future position of media as economic entities, and failing to recognize media market influences, opportunities and market failures. Even well-intentioned assistance efforts often have the unintended effect of distorting the media market, ultimately harming prospects for media sustainability (Nelson et al, 2011: 7).

Further individual countries reaffirm these conclusions. Spurk (2014) reviewed the status of media development programmes in Tanzania and concluded that \$5m annually had failed to create a sustainable media system

In Ukraine, substantial foreign aid contributed to the emergence of an independent media sector, with USAID alone providing \$1.7bn in initiatives since 1992, which included media development (USAID: Ukraine, 2011). Despite these levels of expenditure,

[T]he problem of sustainability is particularly prominent for many donor-sponsored projects. Once these projects are completed, nothing or very little has been done to support the sustainability of the achieved results (Tsetsura et al, 2011: 4).

Ultimately development interventions in media to date have not conceived of media as a system, or as part of a wider information system, that needs to be responsive and sustainable. Development actors have performed roles directly in the media system, such as developing and disseminating content or providing key supporting functions such as training and finance, without a view of how these functions will work after they exit. They have neglected important functions like coordination and regulation

In recognition of this, a small number of initiatives have, over the past decade, attempted to adopt a systemic approach to intervention in the media sector, prioritising sustainability as a route to impact at scale. These initiatives are discussed in the following section.

6.3 Facilitating Pro-poor Media Systems Development

The three case studies considered here have attempted to adopt a systemic approach to addressing constraints to the information transaction and the same assessment framework as above is applied. They are presented as case studies because, firstly, too few programmes have been implemented in order to draw robust generalisable conclusions, and secondly, because the intervention modalities, and the analysis that led to them, are far more complex than in the other types of development intervention in information systems.

Programme contexts

The FIT-SEMA programme in Uganda, implemented by the ILO, had the objective of promoting rural enterprise (Anderson, 2007). ENABLE is a business advocacy programme in Nigeria (Adam Smith International and The Springfield Centre, 2013), while Samarth is an agricultural market development programme in Nepal (SAMARTH, 2014; SAMARTH, 2015). Each of the programmes had similar impact objectives in terms of income change for poor people, but in different geographical, institutional, and cultural contexts.

Each of the programmes arrived at media by identifying information as system which was disadvantaging the poor, and identifying media as a platform that potentially presented an opportunity to improve the functioning of the information system.

Common constraints

Media theory dictates that an audience-driven business model is the optimal approach for viable commercial media programming, using monitoring figures to win advertising income (Foster, 2012). Just compare the audiences for infomercials compared with popular reality TV shows and the respective revenues earned by the channels for the airtime; producing

popular content increases audience. Audience for programmes means audience for advertisers. A virtuous cycle here is that, perhaps unlike in developed countries, what might be in the interest of development actors might also be in the interest of information consumers, if the information is presented in the right way. For example, farming programmes are among the most popular in many developing countries (Myers, 2008).

Two common and inter-related constraints were identified in all three cases, at different stages of development. The first was that programme content was not what was being demanded by audiences. In Nigeria, it was large advertisers who were shaping the content of programmes while in Nepal it was development actors. Where issues relevant to poverty alleviation were being covered, it was being done in a very supply-driven way. There was little that was aware of or responsive to the local context. Farmers were told about new seeds with no information on how to use them or where to buy them. Or they were told about new agricultural techniques but were unable to communicate that they would need to be adapted for their area.

The second common constraint was a lack of, or underperformance of, an audience research function. This is vital to the model specified above. If advertisers are going to pay more for something, they need to know that it has a bigger audience. Similarly, in content development, one cannot know that a new type of programming has potential without testing it and collecting feedback from a potential audience. While in Nepal, there was no real audience research function to speak of, in Nigeria and Uganda, it operated solely in easy to reach urban and peri-urban markets, despite the huge populations of potential consumers of advertisers' products in rural communities.

Uncommon solutions

Each of the programmes addressed these constraints differently and prioritised in a different way according to the results of piloting and their understanding of the context. FIT-SEMA began by attempting to generate pro-poor content, working with a commercial broadcaster, CBS, to develop business programming utilising field-based broadcasting involving poor business owners. While this demonstrated the concept, the function which needed to change to facilitate this was training, both for journalists and for the technical staff to produce the content. Finally, then, once this content was being produced, there was a trust issue amongst potential advertisers owing to the poor quality of audience research, and so FIT-SEMA worked with a range of actors to improve the accuracy of audience data. FIT-SEMA's point of entry was a large commercial broadcaster, to demonstrate the potential of higher quality programming. Subsequently, they partnered with a wide range of different players on different terms, all of which was already involved in the system in some capacity, to shift their long-term incentives.

ENABLE works with business advocacy organisations as its modus operandi, and the media were seen as a way by which the interests of business advocacy organisations could be more effectively communicated. As above, content – which in Nigeria, unlike in the other countries here, included a substantial level of newspaper readership - was not reflective of these goals. ENABLE’s approach differed in that the objective was not to engage with the audience to develop content, but to gather data from them to make content more robust. ENABLE partnered with a large media house to a more evidence-based content development model, leveraging significant contributions from the partner.

The context of Nepal where SAMARTH operates is very different. The hills and valleys of the Himalayas present a highly fragmented media landscape. To overcome the issue of the quality and relevance of content here, SAMARTH worked simultaneously with three radio stations to develop content and concurrently market their audience to advertisers. These smaller radio stations were far more capital constrained and required greater inputs to overcome the challenges of shifting their model from supply-driven to demand driven programming.

Common Problems

The potential of a facilitative approach relies on the capacities and incentives of players in a system. The messages associated with some development interventions demonstrate far clearer incentives to system players than others. Presenting an agricultural programme on increasing crop yield is far more likely to attract attention from an advertiser than a programme which advocates reducing pesticide application.

Identifying players with aligned incentives has proved to be a challenge for all of these programmes, to different degrees. SAMARTH is most significantly affected by the impact of donors and their model of development communications. It is difficult to convince the small radio stations, some of which are entirely funded by donors, to abandon what had become the dominant form of business, with a small potential market to access.

Impact assessment

Effectiveness

When using a facilitative approach which works through others, often in supporting markets seemingly detached from a target group, monitoring of effectiveness becomes both more difficult and more important.

Despite their relative immaturity, all of the three programmes have had demonstrable pro-poor impacts. A follow-up study to the FIT-SEMA programme found that there had been pro-poor impacts by highlighting issues of relevance to poor business owners such as illegal

taxation, monopolistic behaviour, and inadequate infrastructure, which resulted in policy changes and investments. ENABLE too has seen partner-run media programmes highlight weaknesses in a fertiliser subsidy programme and multiple taxation issues for small businesses which have benefitted hundreds of thousands of MSMEs. One of SAMARTH's partner radio stations held a debate to highlight the issues faced by rice farmers by a lack of price transparency. As a consequence, the government released prices earlier, resulting in an income change of \$43.60 for over 5000 farmers.

Despite the programmes being largely focused on agriculture, as the programmes have ultimately sought to change the way the information system works, the impacts have gone far beyond this sector. FIT-SEMA in particular has seen similar changes in the programming models of media expand into other pro-poor sectors such as health.

Scale

All media interventions claim large scale impact owing to the outreach of media relative to other interventions. However, better indicators of scale are achieved by measuring the depth of change, i.e. how pervasive the desired behaviour change is in the media system, and the sustainability, meaning the scale of benefits will continue to grow over time.

While data on effectiveness is limited by the relatively recent nature of interventions, data on scale can be seen in all three programmes. Two years after FIT-SEMA's pilot programmes on business issues, 23 derivative programmes were operating on stations across the country. By 2007, 38 radio stations were found to be airing 55 business-focused programmes reaching an average of seven million people in 15 of the 30 vernacular broadcast languages, considerably after the programme had stopped working in the sector. For ENABLE, eight media outlets were found have changed practice as a result of programme support. In SAMARTH, however, there is no evidence that the changes in behaviour have gone beyond the pilot stations as yet.

Sustainability

Sustainability is one of the primary justifications for following a systemic approach to information. The true test of sustainability is whether a change in behaviour persists beyond a period of programme support. As programme support is on-going in ENABLE and SAMARTH, it is difficult to assess but for FIT-SEMA, there is clear evidence of a behaviour change, both among programme partners and among those that have imitated the change. At the time of the last assessment in 2007, some of the programme started by FIT-SEMA had been running without any external funding for seven years.

While the evidence presented here is very limited, sustainability is built into the model of a systemic approach. Leveraging inputs from players within a system and attempting to catalyse a change which aligns with their incentives, is inherently more likely to last than attempting to change a behaviour simply because it is being externally funded. Each of the programmes here worked with multiple partners, and the terms of programme support were different in every case, from matched funding, to technical assistance, to representation and match-making. What determined the level and intensity of the support was the capacity and incentives of the partner, which were tailored to plan for sustainability from the start.

7. Conclusion

Information plays a vital role in socio-economic development and the reduction of poverty. As such, development actors devote considerable resources to addressing pervasive information-related constraints in developing countries, in economic and social sectors.

However, this paper has argued that information is frequently regarded as an integral element of broader development initiatives and interventions, but is not treated as a system in its own right. There has been a tendency to treat information as something that agencies provide directly, in order to achieve other objectives. The sustainability or responsiveness of information systems – a platform for a two-way transaction, as opposed to unidirectional ‘information push’ – has been neglected as consequence.

Where development actors have overtly sought to develop information systems, it has been found that their approach to intervention has often failed to result in sustained changes in the system.

This paper has examined the efficacy of aid interventions to develop information systems, using the media as lens through which wider issues can be considered. Media was chosen in order to narrow the paper’s focus and because it is an important part of information systems and one where there examples of all three of the approaches identified have been implemented.

The majority of development intervention in media systems are focused on development communications, or ‘pay-to-pay’; the media is used as a tool through which information can be pushed, in order to achieve other developmental objectives. However, as Whitehouse observes:

When you’re looking at it through the lens of a health program or an election program, you are forced to neglect the whole sustainability question (quoted in Kaplan, 2012: 27).

In other fields of development, such as agriculture or financial services, the traditional practice of handing out free seeds or credit to poor people has begun to be replaced by initiatives to develop functioning market systems. The prevailing approach to the media remains outdated in comparison. Such an approach might meet the criteria of effectiveness and, to a lesser degree, scale in the short term, while aid funding remains available, but it is clear that in the longer term it undermines the emergence of a vibrant, independent media system that is responsive to audiences.

Where focus has not been put on the information itself but the system to deliver it, the predominant form of development involvement has been through attempting to fix generalised problems by paying for supporting functions. However, the way that these supporting functions work and the reasons they're underperforming is often forgone in favour of direct support. The efficacy of most media development interventions has been disappointing as a consequence, in terms of effectiveness, scale and sustainability, leaving significant evidence of dysfunctional media systems in their wake.

The case studies presented on developing media systems are necessarily less mature with a smaller evidence base than the other approaches. Nevertheless results have been promising in respect of sustainability and scale of impact. The initiatives have been shaped by a concern about sustainability of the system after intervention has ended: this has then guided their analysis and interventions. There are, however, trade-offs in both the speed of impacting on poor people and in the possibility for the information not to be delivered, relative to the other approaches. However, the potential positive impacts which are sustained and opportunities for large-scale provide insights and lessons for agencies that wish to develop media or information systems in their own right, but should also guide any development actor engaging in such systems, so that they may do no harm.

8. References

Adam Smith International & The Springfield Centre, (2013). *Making Media Work for the Poor*.

Anderson, G. (2007). The role and impact of radio in reforming the rural business environment in Africa. In: *Creating better business environments for enterprise development. African and Global lessons for more effective donor practices*. Fauno Consortium.

Anderson, G. and Hitchins, R. (2007). Expanding the Poor's Access to Business Information and Voice through FM Radio in Uganda. Making Markets Work for the Poor Case Study Series. Swiss Development Corporation.

Ard, Inc, (2004). Montenegro Media Assessment and Evaluation of USAID Media Interventions, Final Report. USAID/Montenegro.

- Center for International Media Assistance, (2015). Funding - Center for International Media Assistance. [online] Available at: <http://www.cima.ned.org/what-is-media-development/funding/> [Accessed 16 Oct. 2015].
- Conrad, D. (2011) Lost in the Shadows of the Radio Tower: A Return to the Roots of Community Radio Ownership in Kenya, Uganda and Tanzania. What happens when / if the donor leaves? Presentation delivered at the 2011 International Communication Association Conference, Boston.
- Costa, P. (2012). The Growing Pains of Community Radio in Africa. *Nordicom Review*, 33 (Special Issue).
- Deane, J. (2008). Why the Media Matters: the Relevance of the Media to Tackling Poverty. In: M. Harvey, ed., *Perspectives on Advancing Governance & Development from the Global Forum for Media Development*, 1st ed. Internews Europe, pp.35-44.
- Djankov, S., McLiesh, C., Nenova, T. and Shleifer, A. (2003). Who Owns the Media?*. *The Journal of Law and Economics*, 46(2), pp.341-382.
- Foster, M. (2011). *Matching the Market and the Model: The Business of Independent News Media*. Washington, D.C.: Center for International Media Assistance.
- Foster, M. (2014). *Measuring the Audience: Why It Matters to Independent News Media and How It Can Contribute to Media Development*. Washington, D.C.: Center for International Media Assistance.
- Frère, M. (2011). The Democratic Republic of the Congo Case Study on Donor Support to Independent Media, 1990-2010. The Media Map Project.
- Gilberds, H. (2011). Mali Case Study on Donor Support to Independent Media, 1990-2010. The Media Map Project.
- Heeks, R. (2015). *ICT4D 2016: New Priorities for ICT4D Policy, Practice and WSIS in a Post-2-15 World*. Development Informatics Working Paper Series. Manchester: Centre for Development Informatics.
- Heeks, R. (2010). Do information and communication technologies (ICTs) contribute to development?. *Journal of International Development*, 22(5), pp.625-640.
- Intergovernmental Council of the IPDC, (2012). *Evaluation Reports on the Projects Selected by the IPDC Bureau*. Paris: IPDC.
- Johnson, H. (2012). *Model Interventions: The Evolution of Media Development Strategies in Bosnia-Herzegovina, Kosovo, and Macedonia from 2000 to 2007*. Ph.D. Columbia.
- Kaplan, D. (2008). *Empowering Independent Media U.S. Efforts to Foster Free and Independent News Around the World Inaugural Report: 2008*. Washington, D.C.: Center for International Media Assistance.
- Kaplan, D. (2012). *Empowering independent media*. Washington, D.C.: Center for International Media Assistance, National Endowment for Democracy.
- DFID, (2002). *The significance of information and communication technologies for reducing poverty*. Think!
- Myers, M. (2014). *Africa's Media Boom: The Role of International Aid*. Washington, D.C.: Center for International Media Assistance.

- Nelson, A., Milosevic, M. and Green, S. (2011). Financially Viable Media in Emerging and Developing Markets. World Association of Newspapers and News Publishers, WAN-IFRA.
- Oecd.org, (2015). *DAC Criteria for Evaluating Development Assistance - OECD*. [online] Available at: <http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm> [Accessed 23 Dec. 2015].
- Samarth-NMDP, (2015). Increasing and Measuring Impact of Agricultural Radio Programming in Nepal, February 2015.
- Samarth-NMDP, (2014). Unlocking Growth and Investment through Advertising and Media in Nepal, 2014.
- Sen, A. (1999). *Development as Freedom*. New York: Knopf.
- Servaes, J. (2008). *Communication for development and social change*. New Delhi, India: Sage Publications.
- Shepherd, A. (1997) *Market Information Services: Theory and Practice*. FAO Agricultural Services Bulletin 125.
- Stiglitz, J. (2002). Information and the Change in the Paradigm in Economics. *American Economic Review*, 92(3), pp.460-501.
- Stiglitz, J. (2004). Information and the Change in the Paradigm in Economics, Part 2. *The American Economist*, 48(1), pp.17–49.
- Susman-Peña, T. (2012). *Making Media Development More Effective*. Washington, D.C.: Center for International Media Assistance.
- Taylor, B. (2013). Effectiveness, Scale and Sustainability in WASH Programmes - A Review. *SSRN Electronic Journal*
- Taylor, B. (2014). Who Wants to Give Forever? Giving Meaning to Sustainability in Development. *Journal of International Development*, 26(8), pp.1181-1196.
- The Springfield Centre, (2008). *A Synthesis of the Making Markets Work for the Poor (M4P) Approach*. DFID and SDC.
- The Springfield Centre and Adam Smith International, (2010). *Making Media Work for the Poor*. DFID.
- The Springfield Centre, (2015). *The Operational Guide for the Making Markets Work for the Poor (M4P) Approach*, 2nd edition. DFID and SDC.
- Tsetsura, K., Grynko, A. and Klueyva, A. (2011). *Ukraine Case Study on Donor Support to Independent Media, 1990-2010*. The Media Map Project.