CATEGORIZING CBR SERVICE DELIVERY: THE ROI-ET CLASSIFICATION
Pim Kuipers*, Kathy Kuipers, Sathapon Mongkolsrisawat
Bordin Weawsorn, Santisak Marungsit

ABSTRACT
This paper presents a descriptive classification framework developed in a training workshop conducted with a community based rehabilitation (CBR) service, in Roi-Et (Northeast Thailand) in June 2002. The "Roi-Et Classification" is based on an adaptation of Bronfenbrenner's Social Ecology model, combined with other frameworks. It seeks to depict for CBR workers and others, the spectrum of strategies that together can comprise CBR practice. It is intended that the Classification and identified strategies will assist in generating discussion about what aspects of CBR intervention should be emphasised within a particular community or service at a particular time. The Roi-Et Classification describes fifteen different elements of CBR service delivery, across two axes or dimensions. One axis identifies four ways in which CBR services are made available (direct provision, assisting, participating and advocating). The other axis identifies five levels of focus of CBR service delivery (individuals, families, communities, formal structures and societal attitudes/beliefs). The Roi-Et Classification is presented in an easy-to-understand, diagrammatic form. While it is anticipated that the Classification will continue to evolve over time, it is hoped that initially, it may contribute to discussion on what comprises (or might comprise) CBR practice, and may also inform CBR conceptualisation, training and evaluation.

INTRODUCTION
A series of workshops and CBR consultancy were conducted by the first author in June 2002, with the Roi-Et Rehabilitation Services for the Rural Blind, which operates under the auspices of the Christian Foundation for the Blind in Thailand, a registered foundation under the patronage of the King of Thailand. In addition to services for the blind, the Roi-Et centre provides CBR services to a variety of people with disabilities within Roi-Et and adjoining provinces. The service has emerged in response to a variety of needs and seeks to be responsive to people with disabilities, families and communities. The success of the Roi-Et CBR service (as with many CBR projects and services) relies largely on the creativity, skills and commitment of staff and managers.
The workshops were developed in recognition that:

- It is beneficial for staff and management to have occasional opportunities for 'taking stock', reviewing their current practice and planning future approaches;
- workers should be able to consider, discuss and critique different models of practice in light of their community experience;
- ideally any service model employed in a CBR service should respond to the needs of people with disabilities, their families and communities in a holistic way.

A fundamental premise of the workshop and the Classification was the recognition that CBR services are usually delivered at a number of levels and in a variety of ways (1). CBR is understood not just as an individual or therapy response to people with disability, but as a social, vocational, economic, educational, justice and development initiative. The Classification proposes that this breadth of practice is mostly healthy and should be further fostered.

**THE ROI-ET CLASSIFICATION**

The version of the Classification presented here, is adapted from an earlier version that was developed and used in training to assist CBR workers and managers in the town of Roi-Et, North-East Thailand. The name of the town means 'one hundred and one' and was adopted for the classification because it reflects something of the variety of ways CBR can be delivered and understood.

Fundamentally, the Classification identifies many of the disadvantages that people with disabilities face - physical, social, informational, access, financial, attitudinal, and indicates mechanisms by which CBR workers might contribute to responding to those disadvantages - by providing support, services or assistance at appropriate levels in appropriate ways. Table 1 provides an overview of the Classification, which is illustrated by figures 1-15.

**THE COLUMNS**

The four columns in Table 1 depict different ways in which CBR services are made available. They reflect the fact that there are different ways of delivering rehabilitation and disability services depending on the needs of the individual, the realities within the CBR service, the workers delivering the services, and the context in which services are delivered. It should be emphasised that there is no implied progression or order of importance among these columns.
The four ways of delivering CBR services depicted here, are drawn from experience and relevant literature which identifies different methods of service delivery (2,3,4). These categories accommodate the participation and self-development of disabled people and the potential of CBR as a vehicle of change in communities and society, influencing power relations and inequities, as well as the development of rehabilitation policy (5, 6).

**Providing**

Services described in the first column in Table 1, would include the provision of services, therapy, information, resources, aids, funding, etc. In general, this form of services requires the CBR worker to have particular skills or content knowledge or access to specific desired resources. In some instances, this form of service delivery might be delivered by remote means, such as the Internet.

**Assisting**

The second column describes service delivery in which recipients of services play an active role. There is less onus on the CBR worker to be a direct resource, but a recognition, that by virtue of their position, they may be able to provide some leverage to people with disabilities to assist them to lessen their disadvantage.

**Participating**

The third column in Table 1 acknowledges that increasingly, participatory aspects of CBR service delivery are being emphasised. Participatory approaches include those in which the CBR worker works in a participatory manner with service recipients. Ideally, the CBR worker's 'participation' would be facilitated by them being a person with a disability, a family member or a member of the community with whom he or she is working.

### Table 1: The Roi-Et Classification of CBR service delivery

<table>
<thead>
<tr>
<th>Focus of CBR service delivery</th>
<th>‘Providing’</th>
<th>‘Assisting’</th>
<th>‘Participating’</th>
<th>‘Advocating’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Figure 1</td>
<td>Figure 2</td>
<td>Figure 3</td>
<td>Figure 4</td>
</tr>
<tr>
<td>Family (Micro)</td>
<td>Figure 5</td>
<td>Figure 6</td>
<td>Figure 7</td>
<td>Figure 8</td>
</tr>
<tr>
<td>Community (Meso)</td>
<td>Figure 9</td>
<td>Figure 10</td>
<td>Figure 11</td>
<td>Figure 12</td>
</tr>
<tr>
<td>Structures (Exo)</td>
<td></td>
<td></td>
<td>Figure 13</td>
<td>Figure 14</td>
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<tr>
<td>Attitudes (Macro)</td>
<td></td>
<td></td>
<td></td>
<td>Figure 15</td>
</tr>
</tbody>
</table>

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Advocating

The fourth column identifies advocacy as a potential part of CBR services. It acknowledges that CBR workers might speak, write, or act on behalf of the interests of a person (or persons) with a disability, or those associated with them. The purpose of this action may be to promote, protect and defend the welfare and justice of individuals or groups.

THE ROWS

The five rows in Table 1, are intended to depict the individual person with a disability and the key contexts that impact on their lives. The five rows are essentially an extension of Bronfenbrenner's Social Ecology Model (7) which were adapted by the first author to include the individual (including biological and psychological) factors (1). This model describes a person's social environment or 'social ecology', which is helpful for understanding social and community variables that impact on the life of a person with a disability. The rows identify key focus points or levels of CBR service delivery.

Individual

The first row, depicting individual level service delivery would include those activities which people mostly associate with rehabilitation. The provision of different types of services to individuals with a disability is a key element in CBR practice.

Family

The second row in Table 1, encompasses services that are focussed on the family of the person with a disability. Depending on the nature of the services being provided, the family is usually fundamental in CBR and plays a key role in assisting the person with a disability. Consequently, the family is also a focus level of CBR service delivery. This level may be seen to roughly correspond with the 'micro-system' in Bronfenbrenner's social ecology model, in which he described immediate person-to-person social relationships, which are key influences in a person's life.

Community

The third row depicts the community level focus of CBR. This might include activities in which the community is the focus for the actions of the CBR worker or service. This corresponds with the 'meso-system' in Bronfenbrenner's typology, which acknowledges the importance of networks, groups and the local community in the life and well-being of the individual.
Structures
The fourth row refers to formal services or structures that might exist through governments or NGOs. This may include the disability service system, educational systems, the healthcare system, social welfare system, etc. These structures, which Bronfenbrenner described as the 'exo-system', clearly have the potential for significant influence over a person with a disability. These influences may include the direct roles and actions of the respective services, as well as their policies and legislation.

Roles, Attitudes and Beliefs
Finally, the fifth row, which corresponds with the 'macro-system' described by Bronfenbrenner, refers to social customs, attitudes and beliefs. It includes social roles and the way in which society assigns status to individuals, objects or events. It may to some extent, be seen as reflecting and influencing other levels, in that it deals with broad societal beliefs, values and lifestyles. This level refers to potential actions of the CBR worker or service that influence these social roles, attitudes and beliefs.

THE FIGURES
The Roi-Et Classification is depicted in diagrammatic form, to promote understanding across languages and cultures. This section describes each figure and details the services or approach that might be provided in it. The person with a disability is portrayed in each of these figures as "in a hole", which is a flawed, but useful way of illustrating the disadvantage or handicap that accompanies disability (e.g. physical, vocational, social, economic, attitudinal or access disadvantage). While we believe that these drawings represent what CBR service delivery does or might include, they are not proposed as the only ways in which CBR might be provided. It is our expectation that the Roi-Et Classification will stimulate debate over what constitutes CBR and that the classification will be further developed and refined over time.

CBR as 'providing' at an individual level
Figure 1, illustrates a CBR worker providing items and services to a disabled person and is what many people traditionally associate with rehabilitation service provision. This would include the provision of direct 'hands-on' therapy, the provision of disability aids or making information available to the individual. Clearly, this type of service responds to a key concern of many people with disabilities and is a centrally important aspect of CBR. Such services are often specifically requested and expected by individuals, families and communities.
CBR as 'assisting' at an individual level

Figure 2, depicts the CBR worker seeking to assist the person with a disability by ‘pulling’ them out of their disadvantage. Services that CBR workers provide to assist individuals, but that are not necessarily offered directly to the person with a disability, would fit this illustration. Included in this aspect of CBR might be activities provided by the CBR worker to overcome disadvantage experienced by the person with a disability. Activities that promote individual development might range from encouragement, to the facilitation of work to assist in skills development.

Figure 2: CBR as 'assisting' at an individual level
CBR as 'participating' at an individual level

In the third illustration, the CBR worker reflects a more participatory approach, attempting to deliver services, which require him or her to identify with the person with a disability, in order to work alongside them to address individual disability issues. This aspect of CBR service delivery reflects cooperation between the CBR worker and the person with a disability. It indicates a service response that meets certain needs through a partnership in problem solving. This aspect of CBR service delivery targets those problems that are best addressed by facilitating independence through participatory approaches.

Figure 3: CBR as 'participating' at an individual level

CBR as 'advocating' at an individual level

Figure 4, illustrates advocacy as a mechanism for delivery of services to people with disabilities through CBR. Advocacy can be defined as arguing in favour of, or working for a cause, idea or policy, such as to improve the rights and role of people with disabilities or engaging in activities such as lobbying for access or services. This form of service delivery acknowledges that the social and physical context of the individual substantially influences handicap and rehabilitation outcome. Within this aspect of CBR service delivery, the CBR worker uses his or her position to assist individuals with disabilities. At the individual level, the CBR worker might advocate for, and with the person with a disability, about their role, skills and support needs within their family.
CBR as 'providing' at a family level

The fifth illustration shows the CBR worker providing direct services to the family. The nature of such services may be much the same as depicted in Figure 1. However in this example, the person with a disability is seen in the context of their family. In addition to therapy, this aspect of service delivery may include the provision of disability aids and modifications in the home.

Figure 5: CBR as ‘providing’ at a family level
CBR as 'assisting' at a family level

In Figure 6, the CBR worker provides assistance at the family level. As with Figure 2, this illustration might include the provision of skills as a way of providing assistance. In this case, skill development would seek to include the whole family. This figure and the next, may be seen to illustrate a major focus of current CBR service delivery, in which skills are transferred to family members (often parents) to assist the family to meet the needs of a person with a disability. In this aspect of CBR service delivery, the family plays a substantial role in service provision.

Figure 6: CBR as ‘assisting’ at a family level

CBR as 'participating' at a family level

Figure 7 depicts the CBR worker as coming alongside the family and participating with them, to address disability issues. As with Figure 3, this aspect of CBR service delivery would be likely to utilise a problem-solving approach and use existing resources to support the family. Strategies within this approach may encourage family solidarity and provide particular support to direct caregivers. Similar to Figure 6, this approach depicts a key strategy within current CBR service delivery, as practised in many settings around the world.
CBR as 'advocating' at a family level

The eighth illustration depicts the CBR worker as advocating for the person with a disability and their family. Typically, strategies at this level, seek to address the needs of a particular family by arguing on their behalf, or lobbying for access or services that will benefit the family and the person with a disability. The CBR worker might advocate for and with the family, to the local community or community leaders.

Figure 7: CBR as ‘participating’ at a family level

Figure 8: CBR as ‘advocating’ at a family level
CBR as 'providing' at a community level

As depicted in Figure 9, in some instances, the CBR worker might directly provide services, information, funding or disability programmes to a community, in order to assist people with disabilities in that community.

Figure 9: CBR as ‘providing’ at a community level

CBR as 'assisting' at a community level

Within this aspect of CBR service delivery, the CBR worker may provide assistance (often in the form of skill development or capacity development) to the local community. As depicted in Figure 10, activities such as Participatory Rural Appraisal (PRA) conducted by an 'outsider', may be seen as falling into this aspect of CBR service delivery.

Figure 10: CBR as ‘assisting’ at a community level
CBR as 'participating' at a community level

As depicted in Figure 11, another aspect of CBR service delivery might include working alongside and being involved in community decision making and problem solving with the local community, around disability issues. This illustration may be seen to depict community development type approaches and may include PRA conducted from within the local community. In such an example as in the previous illustration, the CBR worker might foster and support community initiated activities or efforts, such as self-help groups. A goal of this approach, might be to build greater community solidarity on disability issues.

Figure 11: CBR as ‘participating’ at a community level

CBR as 'advocating' at a community level

Figure 12 also, portrays advocacy, though this time advocating for a community. Such advocacy may involve activities such as community organising, in order to achieve better support or services for people with disabilities within a particular community.

Figure 12: CBR as ‘advocating’ at a community level
CBR as 'participating' at a structural level

In Figure 13, the level of community, social and organisational structures is introduced as a target for CBR service delivery. In this illustration, structures are depicted as people in charge of budget, health and other formal services and systems. The CBR worker works with the community to influence the formal structures that impact on people with disabilities. An aspect of CBR service delivery in this example, might include working with family or community members to influence the local school to promote integration of children with disabilities. The goal of such activities might be to bring about changes in key service delivery systems such as the health, welfare or education systems.

Figure 13: CBR as ‘participating’ at a structural level

CBR as 'advocating' at a structural level

The aspect of CBR illustrated in the fourteenth figure, is advocacy (conducted with people with disabilities, families and community members). The advocacy of the CBR worker in this illustration is primarily directed toward the formal structures described earlier. Advocating at this level within the structures, usually benefits people with disabilities in general, rather than one individual or a family.
Figure 14: CBR as ‘advocating’ at a structural level

CBR as 'advocating' at a beliefs, attitudes and roles level

Figure 15 illustrates the CBR worker advocating and seeking to bring about change in social attitudes, roles and social beliefs relevant to disability. Beliefs, attitudes and roles are depicted by religious and social leaders who may influence these factors. This aspect of CBR service delivery, recognises that societal attitudes and beliefs about disability can have substantial positive or negative influence in areas such as social integration, vocational opportunities and access for people with disabilities. The focus for change in this level of service delivery is clearly very broad and includes the whole society, but may, in the first instance be addressed to the media, and social and religious leadership. Seeking to influence government or NGO policy by advocating for, and with people with disabilities, would also fall within this example.

Figure 15: CBR as ‘advocating’ at a beliefs attitudes and roles level
As noted earlier, the Roi-Et Classification should not be interpreted as a progression with some approaches being superior to others. The current version of the Classification is intended as a description of existing and potential ways of delivering CBR. CBR ideally comprises many aspects or strategies - including medical or therapy, educational, vocational and social responses. Which aspect is emphasised at a particular point in time, within a particular setting, will depend on any number of factors which may include:

- the identified and expressed needs and goals of the person with a disability,
- their functioning, activities and participation,
- their family context,
- their community context,
- the particular issues at hand,
- the physical, cultural, social and economic realities of the broader community and society,
- the nature of service systems and structures within the country,
- the skills and resources of the CBR worker and
- the capacity and structure of the organisation.

The Roi-Et Classification seeks to depict something of this diversity of potential responses to these and other factors.

**THE ROI-ET CLASSIFICATION AND OTHER FRAMEWORKS**

CBR is a dynamic and complex entity. As such, attempts to classify it will always be inadequate in some respects. Despite this, the authors (and others) see substantial value in attempting to describe, clarify or classify CBR service delivery. There have been a number of very helpful frameworks presented over the years, that continue to inform and guide CBR. The Roi-Et Classification may contribute to the existing discussion and thought, in this important area. To this end, we have also identified some preliminary points of comparison with some important frameworks that have recently been published.

Turmusani and colleagues (5) published a very helpful listing of common interpretations of CBR service delivery in a recent article discussing ethical issues in CBR. They described the following six types of CBR service delivery, which may be seen to have distinct parallels with the Roi-Et Classification.

- The provision of rehabilitation through home based programmes. In the Roi-Et Classification such activities are described as 'providing' and 'assisting' at the individual and micro levels (figures 1,2,5,6).
Working with communities. In the Roi-Et Classification aspects of working with communities are elaborated in the third row in Table 1 (figures 9,10,11,12).

Integrating people with disabilities in poverty eradication campaigns. This is not specifically described in the Roi-Et Classification. While such activities may be classified under the columns of 'participating' and 'advocating' (i.e. figures 3,4,7,8,11,12,13,14,15), the lack of specific identification of poverty eradication may highlight an area in which the Roi-Et Classification requires further development.

Income generating activities. As with the previous point, these activities may come broadly under the columns of 'participating' and 'advocating' (figures 3,4,7,8,11,12,13,14,15), and they may indicate scope for refinement of the Classification.

Provision of services by people with disabilities. In the Roi-Et Classification, little distinction is made between who provides the services. It would be expected that service delivery by people with disabilities, would be more in line with services described under the 'participating' approach (figures 3,7,11,13). (Though people with disabilities might provide services in a participatory or non-participatory manner depending on their approach, the nature of the issues, and a host of other variables).

Human rights focus. In the Roi-Et Classification, this form of CBR service delivery is mostly consistent with that described under the 'advocating' column (figures 4, 8, 12,14,15).

In a very different but innovative classification system developed for evaluation purposes by Huib Cornielje and colleagues, (8, 9) four dimensions were proposed. While the intent of this classification system differs from that in which the current system was developed, some overlap may be noted between them.

The first dimension classifies three types of service activity (restoring physical function, social and economic rehabilitation, rights perspective). These three types of service activity may be loosely classified under the columns (Table 1) of 'providing' and 'assisting' (restoring physical function), 'participating' (social and economic rehabilitation) and 'advocating' (rights perspective).

Their second dimension classifies the degree of involvement of people with disabilities in the management of the enterprise (minimal, limited or full). This is an important organisational issue, which is not expressly dealt with, in the Roi-Et Classification. The focus of the Roi-Et Classification is primarily service delivery rather than management structures (though it might be expected that participatory service delivery might arise from participatory management structures).

The third dimension in Cornielje's framework classifies the focus of the service (individuals, family, community). This dimension may be seen to equate directly with the first three rows of the Roi-Et Classification (Table 1).
Their fourth dimension classifies the variety of strategies and integration of a CBR service within a service network. To some extent, this dimension may be seen as evaluating whether the CBR service demonstrates something of the range of strategies described in the Roi-Et Classification.

A significant recent development pertaining to any conceptualisation of disability, rehabilitation or service provision, is the recent release by the World Health Organisation, of the International Classification of Functioning, Disability and Health (ICF) (10). The ICF proposes an interactive model of disability, where a person's body functions and body structures interact with activities, participation and environmental and personal factors to affect, either positively (facilitating) or negatively (inhibiting), all aspects of a person's condition, function, participation and lifestyle (Figure 16).

Figure 16 Structure of the ICF

One of the defining aspects of the ICF is that it seeks to emphasise the influence of environmental factors over a person's functioning and disability. (Interestingly this may be seen to highlight one of the strengths of CBR over other models of rehabilitation service delivery, in its acknowledgement of the importance of environmental factors, such as family issues, community issues, local access issues, etc.).

With reference to the ICF, it may be noted that in the Roi-Et Classification:

- The first column ('providing') mostly pertains to the sorts of interventions that can influence 'body functions' and 'structures'.
- The 'assisting' column may be seen to relate to the ICF category of 'activities,' in which people with disabilities engage.
- The third and fourth columns ('participating' and 'advocating') would appear to relate to 'participation' in the ICF model.
The 'assisting', 'participating' and 'advocating' columns in the Roi-Et Classification, categorise activities that address 'environmental' issues documented in the ICF.

CONCLUSION
As noted previously, the Roi-Et Classification is not presented as a hierarchy in which some forms of service delivery are preferable to others. It is suggested that each aspect has a place in the assortment of strategies that together comprise the universe of CBR service delivery.

The Roi-Et Classification describes different ways of delivering services and different contexts in, and through which CBR might be delivered. The Classification has interesting parallels with previously published frameworks, providing a greater level of detail in classifying many of the complexities of CBR service delivery. While it is anticipated that the Classification will continue to be developed and refined over time, it may assist those involved and associated with CBR to: (a) broaden the ways in which they think about CBR; (b) identify skills and resources needed to work towards desired outcomes for people with disabilities; (c) identify skills and resources needed to work in particular settings; (d) structure a CBR curriculum or training programme; or (e) divide relevant tasks between workers, people with disabilities, managers, self help groups, communities and others.

*Address for correspondence
Research Fellow
Centre of National Research on Disability and Rehabilitation Medicine
University of Queensland, Herston 4006 Australia
email: P.Kuipers@sph.uq.edu.au

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REFERENCES


5. Turmusani M, Vreede A, Wirz SL. *Some Ethical Issues in Community Based Rehabilitation Initiatives in Developing Countries*. Disability and Rehabilitation 2002; 24(10):558-64.


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