

Guideline for developing Web Service for Sharing Data to DBTDACFW Portal

SCHEME DETAILS

Example

Scheme Name : **Sub Mission on Seeds and Planting Material (SEEDS)**

Scheme Code: **BQODZ**

Sponsored Type : Centrally Sponsored

Benefit Type: CASH/KIND

Level of Data collection through MIS (State/District) : District

Level of granularity of data reported on DBT Bharat : State (Manual Reporting)

No. of States Using Central MIS : 8

No. of States Having State MIS: 4

No. of States having No MIS: 25

Status of Data Sent from Dbtdacfw to DBT Bharat : 0 for year 2020-21

1. Please send data month wise only.
2. The Month should be the month in which benefit was given.
3. All financial entries should be in Rs only.
4. **Current year Format:** 2021,2020,2019.
5. Month value is 1 for JAN, 2 for FEB and 12 for DEC.
6. For the SCHEME CODE please go to the dbtdacfw.gov.in.
7. Location wise master(State and District Code) of your DBT Scheme MIS are to be MAPPED with LG Directory Master (<http://lgdirectory.gov.in/>) or download from DBT central portal . This is the first and foremost step to be adopted at your end.
8. Please put all validations given for each parameter.
9. Please **send all district data.** If no data is available for a district then send 0 for such district.

/*Script To Generate Table */

```
CREATE TABLE [dbo].[DBT_Data](
[Sr_no] [bigint] IDENTITY(1,1) NOT NULL,
[SchemCode] [varchar](50) NULL,
[FinYear] [int] NULL,
[Month] [int] NULL,
[district_code] [int] NULL,
[state_code] [int] NULL,
[no_of_beneficiaries_normative_central_and_state_share] [numeric](18, 0) NULL,
[no_of_additional_beneficiaries_supported_by_state] [numeric](18, 0) NULL,
[total_no_of_beneficiaries] [numeric](18, 0) NULL,
[no_of_beneficiaries_record_digitized] [numeric](18, 0) NULL,
[no_of_authenticated_seeded_beneficiaries] [numeric](18, 0) NULL,
[no_of_beneficiaries_whom_mobile_no_captured] [numeric](18, 0) NULL,
[central_share_fund_transferred_cash] [decimal](18, 5) NULL,
[normative_state_share_fund_transferred_cash] [decimal](18, 5) NULL,
[additional_state_share_fund_transferred_cash] [decimal](18, 5) NULL,
[state_share_fund_transferred_to_additional_beneficiaries_cash] [decimal](18, 5) NULL,
[total_fund_transferred_cash] [decimal](18, 5) NULL,
[central_share_expenditure_incurred_inkind] [decimal](18, 5) NULL,
[normative_state_share_expenditure_incurred_inkind] [decimal](18, 5) NULL,
[additional_state_share_expenditure_incurred_inkind] [decimal](18, 5) NULL,
[state_share_expenditure_incurred_to_additional_beneficiaries_inkind] [decimal](18, 5) NULL,
```

```

[total_expenditure_incurred_inkind] [decimal](18, 5) NULL,
[total_no_transactions_electronic_modes_cash] [numeric](18, 0) NULL,
[payment_electronic_modes_cash] [decimal](18, 5) NULL,
[total_no_transactions_other_modes_cash] [numeric](18, 0) NULL,
[payment_other_modes_cash] [decimal](18, 5) NULL,
[unit_of_measurement_inkind] [varchar](50) NULL,
[quantity_transferred_inkind] [numeric](18, 0) NULL,
[no_of_authenticated_transactions_inkind] [numeric](18, 0) NULL,
[dbt_expenditure_incurred_inkind] [decimal](18, 5) NULL,
[CreateDate] [datetime] NULL,
CONSTRAINT [PK_DBT_Data] PRIMARY KEY CLUSTERED
(
[Sr_no] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS =
ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

```

Web Service Development

Data will be fetched by dbtdacfw.gov.in by passing three parameters " **BeneficiaryStatus (Scheme code, Month, Year)**".

The service should provide the parameters defined in given following table. Scheme code is available at dbtdacfw.gov.in for every scheme.

Parameter Requirements

Sr No	Parameter Name	Description
1	schemecode	Five character Scheme Code given to every scheme owner
2	FinYear	Year - 2021, 2020, 2019...
3	Month	Month, for Jan=1, feb=2.....Dec=12
4	state_code	State Code
5	district_code	District Code
6	no_of_beneficiaries_normative_central_and_state_share	Number of beneficiaries normative central and state share
7	no_of_additional_beneficiaries_supported_by_state	Number of additional beneficiaries supported by state
8	total_no_of_beneficiaries	Total No. of Beneficiaries
9	no_of_beneficiaries_record_digitized	No. of Beneficiaries Records Digitized
10	no_of_authenticated_seeded_beneficiaries	No. of Aadhaar authenticated Beneficiaries
11	no_of_beneficiaries_whom_mobile_no_captured	No. of Beneficiaries having Mobile No
12	central_share_fund_transferred_cash	Central share fund transferred cash
13	normative_state_share_fund_transferred_cash	Normative state share fund transferred cash
14	additional_state_share_fund_transferred_cash	Additional state share fund transferred cash
15	state_share_fund_transferred_to_additional_beneficiaries_cash	State share fund transferred to additional beneficiaries cash
16	total_fund_transferred_cash	Fund Transfer (Cash)
17	central_share_expenditure_incurred_inkind	Central share expenditure incurred inkind
18	normative_state_share_expenditure_incurred_inkind	Normative state share expenditure incurred inkind
19	additional_state_share_expenditure_incurred_inkind	Additional state share expenditure incurred inkind
20	state_share_expenditure_incurred_to_additional_beneficiaries_inkind	state_share_expenditure_incurred_to_additional_beneficiaries_inkind
21	total_expenditure_incurred_inkind	Expenditure Incurred (In kind)

22	total_no_transactions_electronic_modes_cash	No. of Transactions through Electronic Modes
23	payment_electronic_modes_cash	Amount Transferred through Electronic Modes
24	total_no_transactions_other_modes_cash	No. of Transactions through Non-electronic Modes
25	payment_other_modes_cash	Amount Transferred through Non-electronic Modes
26	unit_of_measurement_inkind	Unit of Measurement for In Kind Benefit Transferred
27	quantity_transferred-inkind	Quantity Transferred for In Kind Benefit Transferred
28	no_of_authenticated_transactions_inkind	Total No. of Aadhaar Authenticated Transactions (Biometric /Demographic /OTP based)
29	dbt_expenditure_incurred_inkind	Total Expenditure incurred through Aadhaar Authenticated Transactions(in Rs)

Validation details for Scheme MIS Web-Services

Tags Validations					
S.No.	Category	Tag	Type	Scheme Type-CS/CSS	Description
1.	Location	state_code	General	General	
2.		district_code			
3.	general-information	schemecode	Mandatory	General	Scheme Code must have length of 5 characters
4.	scheme-progress	year	Mandatory		Year must be same as the requested year. Example: 2021, 2020, 2019.
5.		month	Mandatory		Month must be the same as the requested month For Jan, Month=1, Feb=2.....Dec=12
	beneficiary				

6.	-details	no_of_beneficiaries_normative_central_and_state_share	Mandatory	CSS	Only zero or positive numeric value is allowed
7.		no_of_additional_beneficiaries_supported_by_state	Mandatory	CSS	Only zero or positive numeric value is allowed
8.		total_no_of_beneficiaries	Mandatory		Only zero or positive numeric value is allowed
9.		no_of_beneficiaries_record_digitized	Mandatory		Only zero or positive numeric value is allowed
10.		no_of_authenticated_seeded_beneficiaries	Mandatory		Only zero or positive numeric value is allowed
11.		no_of_beneficiaries_whom_mobile_no_captured	Mandatory		Only zero or positive numeric value is allowed
12.	fund transfer-details	central_share_fund_transferred_cash	Cash	CSS	Only zero or positive numeric value is allowed
13.		normative_state_share_fund_transferred_cash	Cash	CSS	Only zero or positive numeric value is allowed
14.		additional_state_share_fund_transferred_cash	Cash	CSS	Only zero or positive numeric value is allowed
15.		state_share_fund_transferred_to_additional_beneficiaries_cash	Cash	CSS	Only zero or positive numeric value is allowed
16.		total_fund_transferred_cash	Cash		Only zero or positive numeric value is allowed
17.		central_share_expenditure_incurred_inkind	In-Kind	CSS	Only zero or positive numeric value is allowed
18.		normative_state_share_expenditure_incurred_inkind	In-Kind	CSS	Only zero or positive numeric value is allowed
19.		additional_state_share_expenditure_incurred_inkind	In-Kind	CSS	Only zero or positive numeric value is allowed
20.		state_share_expenditure_incurred_to_additional_beneficiaries_inkind	In-Kind	CSS	Only zero or positive numeric value is allowed
21.		total_expenditure_incurred_inkind	In-Kind		Only zero or positive numeric value is allowed
22.	transaction-details	total_no_transactions_electronic_modes_cash	Cash		Only zero or positive numeric value is allowed
23.		payment_electronic_modes_cash	Cash		Only zero or positive numeric value is allowed
24.		total_no_transactions_other_modes_cash	Optional		Only zero or positive numeric value is allowed
25.		payment_other_modes_cash	Optional		Only zero or positive numeric value is allowed
26.		unit_of_measurement_inkind	In-Kind		Only zero or positive numeric value is allowed
27.		quantity_transferred-inkind	In-Kind		Only zero or positive numeric value is allowed
28.		no_of_authenticated_transactions_inkind	In-Kind		Only zero or positive numeric value is allowed
29.		dbt_expenditure_incurred_inkind	In-Kind		Only zero or positive numeric value is allowed

Data Validations (All Mandatory according to Cash/In-Kind)

Section-II: Beneficiary Details

S.No.	Tag	Applicability	Description
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1.	total_no_of_beneficiaries => no_of_beneficiaries_record_digitized	Applicable for both CS and CSS Schemes	Total number of beneficiaries must be greater than or equal to number of beneficiaries records digitized
2.	no_of_beneficiaries_record_digitized=> no_of_authenticated_seeded_beneficiaries	Applicable for both CS and CSS Schemes	Total number of beneficiaries record digitized must be greater than or equal to number of aadhaar authenticated beneficiaries
3.	total_no_of_beneficiaries => no_of_beneficiaries_whom_mobile_no_captured	Applicable for both CS and CSS Schemes	Total number of beneficiaries must be greater than or equal to number of beneficiaries whom mobile number is captures
4.	total_no_of_beneficiaries = no_of_beneficiaries_normative_central_and_state_share+ no_of_additional_beneficiaries_supported_by_state	Applicable for CSS Schemes only	In case of Centrally Sponsored schemes, Total number of beneficiaries must be equal to Number of beneficiaries from Normative Central and State share and Number of Additional Beneficiaries supported by State

Data Validations (All Mandatory according to Cash/In-Kind)

Section-III & IV: Fund Transfer and Transaction Details

S.No.	Tag	Applicability	Description
1.	total_fund_transferred_cash= payment_electronic_modes_cash + payment_other_modes_cash	Applicable for CS and CSS Cash Schemes	In case of Cash Schemes, Total fund transferred should be equal to the sum of payments through electronic mode and payments through non-electronic mode
2.	total_fund_transferred_cash= central_share_fund_transferred_cash+ normative_state_share_fund_transferred_cash+ additional_state_share_fund_transferred_cash+ state_share_fund_transferred_to_additional_beneficiaries_cash	Applicable for CSS Cash Schemes	In case of Centrally Sponsored Cash Schemes, total fund transferred cash should be equal to sum of Central share fund transferred cash and Normative state share fund transferred cash and Additional state share fund transferred cash and State share fund transferred to additional beneficiaries' cash.
3.	total_expenditure_incurred_inkind= central_share_expenditure_incurred_inkind+ normative_state_share_expenditure_incurred_inkind+ additional_state_share_expenditure_incurred_inkind+ state_share_expenditure_incurred_to_additional_beneficiaries	Applicable for CSS In-Kind Schemes	In case of Centrally Sponsored In-Kind Schemes, then total expenditure incurred in-kind should be equal to sum of Central share expenditure incurred in-kind and Normative state share expenditure incurred in-kind and Additional state share

	aries_inkind		expenditure incurred in-kind and State share expenditure incurred to additional beneficiaries in-kind.
4.	total_expenditure_incurred_inkind=> dbt_expenditure_incurred_inkind	Applicable for CS and CSS In-Kind Schemes	In case of In-kind Schemes, Total expenditure incurred In-Kind should be greater than equal to Total DBT expenditure incurred In-kind

Opening of Ports to Access the Web Service

To access the above service ports needs to open from dbtdacfw.gov.in server to scheme MIS server.

Ports : 80 , 443

From Server IP (dbtdacfw.gov.in): Private IP- 10.248.215.14 , Public IP- 164.100.78.209

Code to develop JSON API to send data to DBTDACFW

```
using DataAccessLayer;

using System;

using System.Collections.Generic;

using System.Data;

using System.Linq;

using System.Web;

using System.Web.Services;

using System.Net;

using Microsoft.Security.Application;

using System.Data.SqlClient;

using System.Runtime.InteropServices;

using System.Globalization;

using Newtonsoft.Json.Linq;

using Newtonsoft.Json;

using System.IO;
```

```
using System.Web.Script.Serialization;

using System.Web.Script.Services;

/// <summary>

/// Summary description for DBTBharatServices

/// </summary>

[WebService(Namespace = "http://tempuri.org/")]

[WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]

// To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.

[System.Web.Script.Services.ScriptService]

public class DBTBharatServices : System.Web.Services.WebService

{

    public DBTBharatServices()

    {

        //Uncomment the following line if using designed components

        //InitializeComponent();

    }

}
```

```
public static string RequestBody()
{
    var bodyStream = new StreamReader(HttpContext.Current.Request.InputStream);
    bodyStream.BaseStream.Seek(0, SeekOrigin.Begin);
    var bodyText = bodyStream.ReadToEnd();
    return bodyText;
}
```

```
public class BeneficiaryDetail
{
    public string SchemCode { get; set; }
    public string FinYear { get; set; }
    public string Mnth { get; set; }

    public string district_code { get; set; }
    public string state_code { get; set; }
```

public string no_of_beneficiaries_normative_central_and_state_share { get; set; }

public string no_of_additional_beneficiaries_supported_by_state { get; set; }

public string total_no_of_beneficiaries { get; set; }

public string no_of_beneficiaries_record_digitized { get; set; }

public string no_of_authenticated_seeded_beneficiaries { get; set; }

public string no_of_beneficiaries_whom_mobile_no_captured { get; set; }

public string central_share_fund_transferred_cash { get; set; }

public string normative_state_share_fund_transferred_cash { get; set; }

public string additional_state_share_fund_transferred_cash { get; set; }

public string state_share_fund_transferred_to_additional_beneficiaries_cash { get; set; }

public string total_fund_transferred_cash { get; set; }

public string central_share_expenditure_incurred_inkind { get; set; }

public string normative_state_share_expenditure_incurred_inkind { get; set; }

public string additional_state_share_expenditure_incurred_inkind { get; set; }

```
public string state_share_expenditure_incurred_to_additional_beneficiaries_inkind { get; set; }
public string total_expenditure_incurred_inkind { get; set; }

public string total_no_transactions_electronic_modes_cash { get; set; }
public string payment_electronic_modes_cash { get; set; }
public string total_no_transactions_other_modes_cash { get; set; }
public string payment_other_modes_cash { get; set; }

public string unit_of_measurement_inkind { get; set; }
public string quantity_transferred_inkind { get; set; }
public string no_of_authenticated_transactions_inkind { get; set; }
public string dbt_expenditure_incurred_inkind { get; set; }

}

public class BeneficiaryTokenRequest
{
    public string SchemeCode { get; set; }
    public string Month { get; set; }
```

```
public string Year { get; set; }  
}
```

```
[WebMethod]
```

```
[ScriptMethod(ResponseFormat = ResponseFormat.Json, UseHttpGet = false)]
```

```
public void BeneficiaryStatus()
```

```
{
```

```
    //string SchemeCode,int m,int y
```

```
    List<BeneficiaryDetail> crp = new List<BeneficiaryDetail>();
```

```
    Dictionary<object, object> dicResponse = new Dictionary<object, object>();
```

```
    var para = JsonConvert.DeserializeObject<BeneficiaryTokenRequest>(RequestBody());
```

```
    string result = "";
```

```
    try
```

```
    {
```

```
        DataSet ds = new DataSet();
```

```
        ds = SqlHelper.ExecuteDataset(DbCon.conStr(), "SendDataToDacFW", para.SchemeCode, para.Month, para.Year);
```

```
        if (ds.Tables[0].Rows.Count > 0)
```

```
        {
```

```
for (int i = 0; i < ds.Tables[0].Rows.Count; i++)
{
    BeneficiaryDetail C = new BeneficiaryDetail();

    C.SchemCode = ds.Tables[0].Rows[i]["SchemCode"].ToString();

    C.FinYear = ds.Tables[0].Rows[i]["FinYear"].ToString();

    C.Mnth = ds.Tables[0].Rows[i]["Mnth"].ToString();

    C.district_code = ds.Tables[0].Rows[i]["district_code"].ToString();

    C.state_code = ds.Tables[0].Rows[i]["state_code"].ToString();

    C.no_of_beneficiaries_normative_central_and_state_share =
ds.Tables[0].Rows[i]["no_of_beneficiaries_normative_central_and_state_share"].ToString();

    C.no_of_additional_beneficiaries_supported_by_state =
ds.Tables[0].Rows[i]["no_of_additional_beneficiaries_supported_by_state"].ToString();

    C.total_no_of_beneficiaries = ds.Tables[0].Rows[i]["total_no_of_beneficiaries"].ToString();

    C.no_of_beneficiaries_record_digitized = ds.Tables[0].Rows[i]["no_of_beneficiaries_record_digitized"].ToString();

    C.no_of_authenticated_seeded_beneficiaries =
ds.Tables[0].Rows[i]["no_of_authenticated_seeded_beneficiaries"].ToString();

    C.no_of_beneficiaries_whom_mobile_no_captured =
ds.Tables[0].Rows[i]["no_of_beneficiaries_whom_mobile_no_captured"].ToString();

    C.central_share_fund_transferred_cash = ds.Tables[0].Rows[i]["central_share_fund_transferred_cash"].ToString();
}
```



```
C.normative_state_share_fund_transferred_cash =  
ds.Tables[0].Rows[i]["normative_state_share_fund_transferred_cash"].ToString();
```

```
C.additional_state_share_fund_transferred_cash =  
ds.Tables[0].Rows[i]["additional_state_share_fund_transferred_cash"].ToString();
```

```
C.state_share_fund_transferred_to_additional_beneficiaries_cash =  
ds.Tables[0].Rows[i]["state_share_fund_transferred_to_additional_beneficiaries_cash"].ToString();
```

```
C.total_fund_transferred_cash = ds.Tables[0].Rows[i]["total_fund_transferred_cash"].ToString();
```

```
C.central_share_expenditure_incurred_inkind =  
ds.Tables[0].Rows[i]["central_share_expenditure_incurred_inkind"].ToString();
```

```
C.normative_state_share_expenditure_incurred_inkind =  
ds.Tables[0].Rows[i]["normative_state_share_expenditure_incurred_inkind"].ToString();
```

```
C.additional_state_share_expenditure_incurred_inkind =  
ds.Tables[0].Rows[i]["additional_state_share_expenditure_incurred_inkind"].ToString();
```

```
C.state_share_expenditure_incurred_to_additional_beneficiaries_inkind =  
ds.Tables[0].Rows[i]["state_share_expenditure_incurred_to_additional_beneficiaries_inkind"].ToString();
```

```
C.total_expenditure_incurred_inkind = ds.Tables[0].Rows[i]["total_expenditure_incurred_inkind"].ToString();
```

```
C.total_no_transactions_electronic_modes_cash =  
ds.Tables[0].Rows[i]["total_no_transactions_electronic_modes_cash"].ToString();
```

```
        C.payment_electronic_modes_cash = ds.Tables[0].Rows[i]["payment_electronic_modes_cash"].ToString();
        C.total_no_transactions_other_modes_cash =
ds.Tables[0].Rows[i]["total_no_transactions_other_modes_cash"].ToString();
        C.payment_other_modes_cash = ds.Tables[0].Rows[i]["payment_other_modes_cash"].ToString();

        C.unit_of_measurement_inkind = ds.Tables[0].Rows[i]["unit_of_measurement_inkind"].ToString();
        C.quantity_transferred_inkind = ds.Tables[0].Rows[i]["quantity_transferred_inkind"].ToString();
        C.no_of_authenticated_transactions_inkind =
ds.Tables[0].Rows[i]["no_of_authenticated_transactions_inkind"].ToString();
        C.dbt_expenditure_incurred_inkind = ds.Tables[0].Rows[i]["dbt_expenditure_incurred_inkind"].ToString();
        crp.Add(C);
    }
    var query1 = from c in crp select c;
    JavaScriptSerializer js = new JavaScriptSerializer();
    result = js.Serialize(query1.ToList());
    //result = "{\"ResponseCode\":\"Success\", \"data\": \" + result.Replace("\\", "") + \"}\"";
    result = result.Replace("\\", "");
}
else
```

```
{  
    result = "{\"ResponseCode\": \"failed\", \"Response\": \"No record found\"}";  
}
```

```
Context.Response.Write(result.Replace("{ \"d\": null }", ""));
```

```
}
```

```
catch (Exception)
```

```
{
```

```
    Context.Response.Redirect("{\"ResponseCode\": \"failed\", \"Response\": \"Invalid Request\"}");
```

```
}
```

```
}
```

```
}
```

